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<222> (1)...(145) <223> X = any amino acid or stop code

<400> 1170 Asn Gly Thr Leu Phe Ile Met Val Met His Ile Lys Asp Leu Val Ser Asp Tyr Lys Glu Xaa Trp Leu Xaa Arg Lys Pro Leu Pro Trp Xaa Glu Ala Leu Leu Arg Asp Cys Phe Phe Yaa Val Thr Glu Asn Glv Ala Asp Pro Asn Pro Tyr Val Lys Thr Tyr Leu Leu Pro Asp Asn His 55 Lys Thr Ser Lys Arg Lys Thr Lys Ile Ser Arg Lys Thr Arg Asn Pro 70 Thr Phe Asn Glu Met Leu Val Tyr Ser Gly Tyr Ser Lys Glu Thr Leu 85 90 Arg Gln Arg Glu Leu Gln Leu Ser Val Leu Ser Ala Glu Ser Leu Arg 100 105 Glu Asn Phe Phe Leu Gly Gly Val Thr Leu Pro Leu Lys Asp Phe Asn 120 . 125 Leu Ser Lys Glu Thr Val Lys Trp Tyr Gln Leu Thr Ala Ala Thr Tyr 135 140 Leu 145

<210> 1171 <211> 464 <212>Amino acid <213> Homo sapiens

·<400> 1171 Leu His Arg Ile Met Gln Leu Ala Val Val Ser Gln Val Leu Glu 10 Asn Gly Ser Ser Val Leu Val Cys Leu Glu Glu Gly Trp Asp Ile Thr 25 Ala Gln Val Thr Ser Leu Val Gln Leu Leu Ser Asp Pro Phe Tyr Arg 40 Thr Leu Glu Gly Phe Gln Met Leu Val Glu Lys Glu Trp Leu Ser Phe ' Gly His Lys Phe Ser Gln Arg Ser Ser Leu Thr Leu Asn Cys Gln Gly 75 Ser Gly Phe Ala Pro Val Phe Leu Gln Phe Leu Asp Cys Val His Gln 90 Val His Asn Gln Tyr Pro Thr Glu Phe Glu Phe Asn Leu Tyr Tyr Leu 105 Lys Phe Leu Ala Phe His Tyr Val Ser Asn Arg Phe Lys Thr Phe Leu 120 125 Leu Asp Ser Asp Tyr Glu Arg Leu Glu His Gly Thr Leu Phe Asp Asp 135 140 Lys Gly Glu Lys His Ala Lys Lys Gly Val Cys Ile Trp Glu Cys Ile 155 Asp Arg Met His Lys Arg Ser Pro Ile Phe Phe Asn Tyr Leu Tyr Ser 170 Pro Leu Glu Ile Glu Ala Leu Lys Pro Asn Val Asn Val Ser Ser Leu 180 185

Lys Lys Trp Asp Tyr Tyr Ile Glu Glu Thr Leu Ser Thr Gly Pro Ser 200 Tyr Asp Trp Met Met Leu Thr Pro Lys His Phe Pro Ser Glu Asp Ser 215 220 Asp Leu Ala Gly Glu Ala Gly Pro Arg Ser Gln Arg Arg Thr Val Trp 230 235 Pro Cys Tyr Asp Asp Val Ser Cys Thr Gln Pro Asp Ala Leu Thr Ser 245 250 Leu Phe Ser Glu Ile Glu Lys Leu Glu His Lys Leu Asn Gln Ala Pro 265 Glu Lys Trp Gln Gln Leu Trp Glu Arg Val Thr Val Asp Leu Lys Glu 280 Glu Pro Arg Thr Asp Arg Ser Gln Arg His Leu Ser Arg Ser Pro Gly 295 Ile Val Ser Thr Asn Leu Pro Ser Tyr Gln Lys Arg Ser Leu Leu His 310 315 Leu Pro Asp Ser Ser Met Gly Glu Glu Gln Asn Ser Ser Ile Ser Pro 325 330 Ser Asn Gly Val Glu Arg Arg Ala Ala Thr Leu Tyr Ser Gln Tyr Thr 340 345 Ser Lys Asn Asp Glu Asn Arg Ser Phe Glu Gly Thr Leu Tyr Lys Arg 360 Gly Ala Leu Leu Lys Gly Trp Lys Pro Arg Trp Phe Val Leu Asp Val 375 Thr Lys His Gln Leu Arg Tyr Tyr Asp Ser Gly Glu Asp Thr Ser Cys 390 395 Lys Gly His Ile Asp Leu Ala Glu Val Glu Met Val Ile Pro Ala Gly 405 410 Pro Ser Met Gly Ala Pro Lys His Thr Ser Asp Lys Ala Phe Phe Asp 425 Leu Lys Thr Ser Lys Arg Val Tyr Asn Phe Cys Ala Gln Asp Gly Gln 440 445 Ser Ala Gln Gln Trp Met Asp Lys Ile Gln Ser Cys Ile Ser Asp Ala 455 460

<210> 1172 <211> 256 <212>Amino acid <213> Homo sapiens

<400> 1172 Glu Val Glu Gly Pro Arg Arg Val Ser Pro Ala Pro Glu Thr Leu Gly 10 Met Glu Glu Ser Val Val Arg Pro Ser Val Phe Val Val Asp Gly Gln 20 Thr Asp Ile Pro Phe Thr Arg Leu Gly Arg Ser His Arg Arg Gln Ser 40 Cys Ser Val Ala Arg Val Gly Leu Gly Leu Leu Leu Leu Met Gly 55 Ala Gly Leu Ala Val Gln Gly Trp Phe Leu Leu Gln Leu His Trp Arg 70 Leu Gly Glu Met Val Thr Arg Leu Pro Asp Gly Pro Ala Gly Ser Trp 85 90 Glu Gln Leu Ile Gln Glu Arg Arg Ser His Glu Val Asn Pro Ala Ala 105 His Leu Thr Gly Ala Asn Ser Ser Leu Thr Gly Ser Gly Gly Pro Leu 120

Leu Trp Glu Thr Gln Leu Gly Leu Ala Phe Leu Arg Gly Leu Ser Tyr 135 His Asp Gly Ala Leu Val Val Thr Lys Ala Gly Tyr Tyr Tyr Ile Tyr 150 15**5** Ser Lys Val Gln Leu Gly Gly Val Gly Cys Pro Leu Gly Leu Ala Ser 165 170 Thr Ile Thr His Gly Leu Tyr Lys Arg Thr Pro Arg Tyr Pro Glu Glu 185 190 Leu Glu Leu Leu Val Ser Gln Gln Ser Pro Cys Gly Arg Ala Thr Ser 195 200 205 Ser Ser Arg Val Trp Trp Asp Ser Ser Phe Leu Gly Gly Val Val His 215 220 Leu Glu Ala Gly Glu Glu Val Val Arg Val Leu Asp Glu Arg Leu 230 235 Val Arg Leu Arg Asp Gly Thr Arg Ser Tyr Phe Gly Ala Phe Met Val

<210> 1173
<211> 117
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(117)
<223> X = any amino acid or stop code

<400> 1173 Gln Ser Ala Glu Leu Gly Pro Arg Arg Arg Glu Gly Ser Arg Arg Pro 5 10 Ser Cys Thr Lys Ala Ser Lys Pro Trp Arg Arg Pro Gly Gly Pro 20 Thr Ser Gly Leu Gly Xaa Gly Pro Leu Ser Pro Gly Pro Tyr Gln Cys 40 Arg Pro Ser Leu Pro Ala Gln Leu Tyr Pro Gln Ser Leu Met Ala Ala 55 Ala Thr Leu Arg Thr Pro Thr Gln Val Ser Ala Ala Ser Ser Arg Pro 70 His Thr Pro Ser Pro Thr His Val Leu Lys Pro Ser Val Arg Gly Ala 85 . 90 Cys Ser Ser Pro Arg Cys Pro Gly Ser Gly Thr Leu Arg Arg Ser Trp 100 105 Val Gly Pro Phe Phe 115 117

<210> 1174 <211> 370 <212>Amino acid <213> Homo sapiens

<400> 1174
Leu Trp Trp Pro Pro Leu Ser Arg His Ala Ala His Arg Gln Trp Pro

10 Gly Pro Thr Ala Pro Arg Gly Leu Gly His Lys Val Lys Gly Arg Gly 20 25 Ala Ser Pro Ala Ala Met Trp Ser Cys Ser Trp Phe Asn Gly Thr Gly 40 Leu Val Glu Glu Leu Pro Ala Cys Gln Asp Leu Gln Leu Gly Leu Ser 55 Leu Leu Ser Leu Leu Gly Leu Val Val Gly Val Pro Val Gly Leu Cys 70 75 Tyr Asn Ala Leu Leu Val Leu Ala Asn Leu His Ser Lys Ala Ser Met 90 Thr Met Pro Asp Val Tyr Phe Val Asn Met Ala Val Ala Gly Leu Val 105 Leu Ser Ala Leu Ala Pro Val His Leu Leu Gly Pro Pro Ser Ser Arg 120 Trp Ala Leu Trp Ser Val Gly Gly Glu Val His Val Ala Leu Gln Ile 135 140 Pro Phe Asn Val Ser Ser Leu Val Ala Met Tyr Ser Thr Ala Leu Leu 150 155 Ser Leu Asp His Tyr Ile Glu Arg Ala Leu Pro Arg Thr Tyr Met Ala 165 170 Ser Val Tyr Asn Thr Arg His Val Cys Gly Phe Val Trp Gly Gly Ala 185 Leu Leu Thr Ser Phe Ser Ser Leu Leu Phe Tyr Ile Cys Ser His Val 195 200 205 Ser Thr Arg Ala Leu Glu Cys Ala Lys Met Gln Asn Ala Glu Ala Ala 220 Asp Ala Thr Leu Val Phe Ile Gly Tyr Val Val Pro Ala Leu Ala Thr 230 235 Leu Tyr Ala Leu Val Leu Leu Ser Arg Val Arg Arg Glu Asp Thr Pro 245 250 Leu Asp Arg Asp Thr Gly Arg Leu Glu Pro Ser Ala His Arg Leu Leu 265 Val Ala Thr Val Cys Thr Gln Phe Gly Leu Trp Thr Pro His Tyr Leu 280 Ile Leu Leu Gly His Thr Val Ile Ile Ser Arg Gly Lys Pro Val Asp 300 Ala His Tyr Leu Gly Leu Leu His Phe Val Lys Asp Phe Ser Lys Leu 310 315 Leu Ala Phe Ser Ser Phe Val Thr Pro Leu Leu Tyr Arg Tyr Met 325 330 Asn Gln Ser Phe Pro Ser Lys Leu Gln Arg Leu Met Lys Lys Leu Pro 345 Cys Gly Asp Arg His Cys Ser Pro Asp His Met Gly Val Gln Gln Val 360 Leu Ala 370

<210> 1175 <211> 145 <212>Amino acid <213> Homo sapiens

Gln Glu Leu Val Leu Gly Leu Cys Tyr Met Ser Tyr Leu Ala Phe Leu

35 40 Tyr Met Thr Phe Asp Phe Cys Cys Leu Tyr Phe Ser Thr Val Tyr Ala 55 60 Pro Ser Phe Lys Tyr Ile Cys Val His Thr Asp Thr His Ile Cys Val 75 Cys Val Cys Ile Tyr Leu Ser Ser Val Val Ser Lys Ser Ser Ala Glu 90 Ala Asp Gly Val Leu Gln Pro Arg Arg His Pro Ala Ser Leu Leu Ile 105 Val Phe Ala Thr Ser Ile Ser Glu Ser Ser Leu Leu Ile Phe Ser Phe 120 125. Gln Lys Thr Glu Ala Lys Leu Ile Val Phe Ala Val Ser Leu Ala Ala 135 Lys 145

<210> 1176 <211> 50 <212>Amino acid <213> Homo sapiens

<210> 1177 <211> 231 <212>Amino acid <213> Homo sapiens

<400> 1177 Arg Gln His Ala Glu Glu Arg Gly Arg Arg Asn Pro Lys Thr Gly Leu . 15 10 Thr Leu Glu Arg Val Gly Pro Glu Ser Ser Pro Tyr Leu Leu Arg Arg 20 25 His Gln Arg Gln Gly Gln Glu Gly Glu His Tyr His Ser Cys Val Gln 40 Leu Ala Pro Thr Arg Gly Leu Glu Glu Ser Gly His Gly Pro Leu Ser 55 Leu Ala Gly Gly Pro Arg Val Gly Gly Val Ala Ala Ala Thr Glu 70 75 Ala Pro Arg Met Glu Trp Lys Val Lys Val Arg Ser Asp Gly Thr Arg 90 Tyr Val Ala Lys Arg Pro Val Arg Asp Arg Leu Leu Lys Ala Arg Ala 105 Leu Lys Ile Arg Glu Glu Arg Ser Gly Met Thr Thr Asp Asp Asp Ala 120 125 Val Ser Glu Met Lys Met Gly Arg Tyr Trp Ser Lys Glu Glu Arg Lys

135 140 Gln His Leu Ile Arg Ala Arg Glu Gln Arg Lys Arg Arg Glu Phe Met 150 155 Met Gln Ser Arg Leu Glu Cys Leu Arg Glu Gln Gln Asn Gly Asp Ser 170 Lys Pro Glu Leu Asn Ile Ile Ala Leu Ser His Arg Lys Thr Met Lys 180 185 Lys Arg Asn Lys Lys Ile Leu Asp Asn Trp Ile Thr Ile Gln Glu Met 200 Leu Ala His Gly Ala Arg Ser Ala Asp Gly Lys Arg Val Tyr Asn Pro 215 Leu Leu Ser Val Thr Thr Val 230 231

<210> 1178 <211> 204 <212>Amino acid <213> Homo sapiens

<400> 1178 Ser Asp Arg Gly Cys Ser Ala Ala Ala Gly Arg Asn Met Thr Ala Val 10 Gly Val Gln Ala Gln Arg Pro Leu Gly Gln Arg Gln Pro Arg Ser 25 Phe Phe Glu Ser Phe Ile Arg Thr Leu Ile Ile Thr Cys Val Ala Leu 40 Ala Val Val Leu Ser Ser Val Ser Ile Cys Asp Gly His Trp Leu Leu Ala Glu Asp Arg Leu Phe Gly Leu Trp His Phe Cys Thr Thr Thr Asn Gln Ser Val Pro Ile Cys Phe Arg Asp Leu Gly Gln Ala His Val Pro Gly Leu Ala Val Gly Met Gly Leu Val Arg Ser Val Gly Ala Leu Ala 105 Val Val Ala Ala Ile Phe Gly Leu Glu Phe Leu Met Val Ser Gln Leu 120 Cys Glu Asp Lys His Ser Gln Cys Lys Trp Val Met Gly Ser Ile Leu 135 Leu Leu Val Ser Phe Val Leu Ser Ser Gly Gly Leu Leu Gly Phe Val 150 155 Ile Leu Leu Arg Asn Gln Val Thr Leu Ile Gly Phe Thr Leu Met Phe 170 Trp Çys Glu Phe Thr Ala Ser Phe Leu Leu Phe Leu Asn Ala Ile Ser 185 Gly Leu His Ile Asn Ser Ile Thr His Pro Trp Glu 200

<210> 1179 <211> 179 <212>Amino acid <213> Homo sapiens

<400> 1179
Gln Ile Leu Pro Asn Leu Tyr Leu Gly Ser Ala Arg Asp Ser Ala Asn

5 Leu Glu Ser Leu Ala Lys Leu Gly Ile Arg Tyr Ile Leu Asn Val Thr 25 Pro Asn Leu Pro Asn Phe Phe Glu Lys Asn Gly Asp Phe His Tyr Lys 40 Gln Ile Pro Ile Ser Asp His Trp Ser Gln Asn Leu Ser Arg Phe Phe 55 Pro Glu Ala Ile Glu Phe Ile Asp Glu Ala Leu Ser Gln Asn Cys Gly 75 Val Leu Val His Cys Leu Ala Gly Val Ser Arg Ser Val Thr Val Thr 90 Val Ala Tyr Leu Met Gln Lys Leu His Leu Ser Leu Asn Asp Ala Tyr 105 Asp Leu Val Lys Arg Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe 115 120 125 Met Gly Gln Leu Leu Asp Phe Glu Arg Ser Leu Arg Leu Glu Glu Arg 135 140 His Ser Gln Glu Gln Gly Ser Gly Gln Ala Ser Ala Ala Ser Asn 150 155 Pro Pro Ser Phe Phe Thr Thr Pro Thr Ser Asp Gly Ala Phe Glu Leu 165 170 Ala Pro Thr 179

<210> 1180 <211> 159 <212>Amino acid <213> Homo sapiens

<400> 1180 Arg Lys Ser Leu His Glu Asn Lys Leu Lys Arg Leu Gln Glu Lys Val 10 Glu Val Leu Glu Ala Lys Lys Glu Glu Leu Glu Thr Glu Asn Gln Val Leu Asn Arg Gln Asn Val Pro Phe Glu Asp Tyr Thr Arg Leu Gln Lys 40 Arg Leu Lys Asp Ile Gln Arg Arg His Asn Glu Phe Arg Ser Leu Ile 50 . 55 Leu Val Pro Asn Met Pro Pro Thr Ala Ser Ile Asn Pro Val Ser Phe 70 Gln Ser Ser Ala Met Gly Ser Lys His Gly Thr Thr Ile Ser Ser 90 95 Tyr Ala Gly Gly Thr Thr Ser Lys Gly Thr Leu Ser Thr Ser Gln Lys 105 110 Thr Arg Arg Thr Gly Asn Asn Thr Lys Lys Thr Thr Arg Gly Thr Trp 120 125 Ile Phe Arg Arg Met Met Phe Leu Glu Asn Arg Gln Ile Lys Arg Gly 135 140 Glu Val Gly Asp Ser Val Lys Leu Asp Ile Leu Thr Cys Gly Ile 155

<210> 1181 <211> 328 <212>Amino acid <213> Homo sapiens <220> <221> misc feature

<222> (1)...(328) <223> X = any amino acid or stop code

<400> 1181 Gly Arg Pro Gly Ala Gly Ala Ser Glu Leu Phe Pro Ser Val Thr Thr Asp Leu Ser Val Ser Lys Gln Asn Ala Cys Leu Thr Cys Val Asp Phe 20 Val Thr Val His Val Cys Met Gly Phe Trp Gly Ile Gly Pro Gly Ala 40 Leu Ser Thr Ser Cys Ile Pro Tyr Pro Leu Ser His Gly Pro Gly Ser 55 Val Lys Ala Glu Met Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile 70 75 Leu Cys Val Arg Leu Ala Val Leu Leu Ala Val Thr Leu Thr Val Pro 85 Val Val Leu Phe Pro Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro 105 Gly Lys Ala Phe Ser Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu 120 Leu Val Leu Val Asn Val Leu Val Ile Cys Val Pro Thr Ile Arg Asp 135 Ile Phe Gly Val Ile Gly Ser Thr Ser Ala Pro Ser Leu Ile Phe Ile 150 155 Leu Pro Ser Ile Phe Tyr Leu Arg Ile Val Pro Ser Glu Val Glu Pro 165 170 Phe Leu Ser Trp Pro Lys Ile Gln Ala Leu Cys Phe Gly Val Leu Gly 185 Val Leu Phe Met Ala Val Ser Leu Gly Phe Met Phe Ala Asn Trp Ala 200 Thr Gly Gln Ser Arg Met Ser Gly His Xaa Ser Gly Pro Ala Gly Pro 215 220 Gly Pro Cys Ala His Ala His Gly Gly Val Arg Ala Ala Pro Xaa Gly 230 Pro Ser Cys Pro Thr Cys Gly Gly Gly Trp Phe Pro Xaa Thr Trp Leu 245 250 Ser Glu Ala Gly Asp Ser Arg Gly Cys Arg Leu Ala His Phe Pro Pro 265 Pro Gln Gly Cys Gln Ala Trp Ile Met Ala Leu Ile Pro Thr Pro Thr 280 295 300 Glu Glu Glu Glu Glu Ala Arg Ser Trp Trp Ser Leu Cys Pro Ala 310 315 Gln Ser Ser Leu Pro Pro Pro Gly 325

<210> 1182 <211> 144 <212>Amino acid <213> Homo sapiens

<210> 1183 <211> 484 <212>Amino acid <213> Homo sapiens

<400> 1183

Met Ser Glu Glu Arg His Glu Arg Val Arg Lys Lys Tyr His Ile Leu Val Glu Gly Asp Gly Ile Pro Pro Pro Ile Lys Ser Phe Lys Glu Met 40 Lys Phe Pro Ala Ala Ile Leu Arg Gly Leu Lys Lys Lys Gly Ile His 55 His Pro Thr Pro Ile Gln Ile Gln Gly Ile Pro Thr Ile Leu Ser Gly Arg Asp Met Ile Gly Ile Ala Phe Thr Gly Ser Gly Lys Thr Leu Val Phe Thr Leu Pro Val Ile Met Phe Cys Leu Glu Gln Glu Lys Arg Leu 105 Pro Phe Ser Lys Arg Glu Gly Pro Tyr Gly Leu Ile Ile Cys Pro Ser 120 Arg Glu Leu Ala Arg Gln Thr His Gly Ile Leu Glu Tyr Tyr Cys Arg 135 Leu Leu Gln Glu Asp Ser Ser Pro Leu Leu Arg Cys Ala Leu Cys Ile 150 155 Gly Gly Met Ser Val Lys Glu Gln Met Glu Thr Ile Arg His Gly Val 170 His Met Met Val Ala Thr Pro Gly Arg Leu Met Asp Leu Leu Gln Lys 185 Lys Met Val Ser Leu Asp Ile Cys Arg Tyr Leu Ala Leu Asp Glu Ala 200 Asp Arg Met Ile Asp Met Gly Phe Glu Gly Asp Ile Arg Thr Ile Phe 215 220 Ser Tyr Phe Lys Gly Gln Arg Gln Thr Leu Leu Phe Ser Ala Thr Met 230 235 Pro Lys Lys Ile Gln Asn Phe Ala Lys Ser Ala Leu Val Lys Pro Val 250 Thr Ile Asn Val Gly Arg Ala Gly Ala Ala Ser Leu Asp Val Ile Gln 265

Asp Asp Pro Ile Lys Thr Ser Trp Thr Pro Pro Arg Tyr Val Leu Ser

Glu Val Glu Tyr Val Lys Glu Glu Ala Lys Met Val Tyr Leu Leu Glu 280 Cys Leu Gln Lys Thr Pro Pro Pro Val Leu Ile Phe Ala Glu Lys Lys 295 Ala Asp Val Asp Ala Ile His Glu Tyr Leu Leu Leu Lys Gly Val Glu 310 315 Ala Val Ala Ile His Gly Gly Lys Asp Gln Glu Glu Arg Thr Lys Ala 330 Ile Glu Ala Phe Arg Glu Gly Lys Lys Asp Val Leu Val Ala Thr Asp 345 Val Ala Ser Lys Gly Leu Asp Phe Pro Ala Ile Gln His Val Ile Asn 360 Tyr Asp Met Pro Glu Glu Ile Glu Asn Tyr Val His Arg Ile Gly Arg 375 Thr Gly Arg Ser Gly Asn Thr Gly Ile Ala Thr Thr Phe Ile Asn Lys 390 395 Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Glu 405 410 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp 420 425 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln 455 Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser 475 Ser Met Asp Phe 484

<210> 1184 <211> 125 <212>Amino acid <213> Homo sapiens

<400> 1184 Ile Glu Thr Thr Gln Pro Ser Glu Asp Thr Asn Ala Asn Ser Gln Asp 10 Asn Ser Met Gln Pro Glu Thr Ser Ser Gln Gln Leu Leu Ser Pro 25 Thr Leu Ser Asp Arg Gly Gly Ser Arg Gln Asp Ala Ala Asp Ala Gly 40 Lys Pro Gln Arg Lys Phe Gly Gln Trp Arg Leu Pro Ser Ala Pro Lys 55 Pro Ile Ser His Ser Val Ser Ser Val Asn Leu Arg Phe Gly Gly Arg 75 Thr Thr Met Lys Ser Val Val Cys Lys Met Asn Pro Met Thr Asp Ala 90 Ala Ser Cys Gly Ser Glu Val Lys Lys Trp Trp Thr Arg Gln Leu Thr 100 105 Val Glu Ser Asp Glu Ser Gly Asp Asp Leu Leu Asp Ile

<210> 1185 <211> 73 <212>Amino acid <213> Homo sapiens

<210> 1186 <211> 343 <212>Amino acid <213> Homo sapiens

<400> 1186 Phe Thr Val Phe Ile Leu Gly Ile Thr Ile Arg Pro Leu Val Glu Phe Leu Asp Val Lys Arg Ser Asn Lys Lys Gln Gln Ala Val Ser Glu Glu 25 Ile Tyr Cys Arg Leu Phe Asp His Val Lys Thr Gly Ile Glu Asp Val 40 Cys Gly His Trp Gly His Asn Phe Trp Arg Asp Lys Phe Lys Lys Phe Asp Asp Lys Tyr Leu Arg Lys Leu Leu Ile Arg Glu Asn Gln Pro Lys 70 Ser Ser Ile Val Ser Leu Tyr Lys Lys Leu Glu Ile Lys His Ala Ile 85 90 Glu Met Ala Glu Thr Gly Met Ile Ser Thr Val Pro Thr Phe Ala Ser 105 Leu Asn Asp Cys Arg Glu Glu Lys Ile Arg Lys Val Thr Ser Ser Glu 120 Thr Asp Glu Ile Arg Glu Leu Leu Ser Arg Asn Leu Tyr Gln Ile Arg 135 140 Gln Arg Thr Leu Ser Tyr Asn Arg His Ser Leu Thr Ala Asp Thr Ser 150 155 Glu Arg Gln Ala Lys Glu Ile Leu Ile Arg Arg Arg His Ser Leu Arg 170 Glu Ser Ile Arg Lys Asp Ser Ser Leu Asn Arg Glu His Arg Ala Ser 185 Thr Ser Thr Ser Arg Tyr Leu Ser Leu Pro Lys Asn Thr Lys Leu Pro 200 Glu Lys Leu Gln Lys Arg Arg Thr Ile Ser Ile Ala Asp Gly Asn Ser 215 220 Ser Asp Ser Asp Ala Asp Ala Gly Thr Thr Val Leu Asn Leu Gln Pro 235 Arg Ala Arg Arg Phe Leu Pro Glu Gln Phe Ser Lys Lys Ser Pro Gln 250 Ser Tyr Lys Met Glu Trp Lys Asn Glu Val Asp Val Asp Ser Gly Arg 265 Asp Met Pro Ser Thr Pro Pro Thr Pro His Ser Arg Glu Lys Gly Thr 280 Gln Thr Ser Gly Leu Leu Gln Gln Pro Leu Leu Ser Lys Asp Gln Ser . 300 295

<210> 1187 <211> 146 <212>Amino acid <213> Homo sapiens

<400> 1187 His Glu Glu Ala Ser Gly Leu Ser Val Trp Met Gly Lys Gln Met Glu 10 Pro Leu His Ala Val Pro Pro Ala Ala Ile Thr Leu Ile Leu Ser Leu 25 Leu Val Ala Val Phe Thr Glu Cys Thr Ser Asn Val Ala Thr Thr 40 Leu Phe Leu Pro Ile Phe Ala Ser Met Ser Arg Ser Ile Gly Leu Asn 55 Pro Leu Tyr Ile Met Leu Pro Cys Thr Leu Ser Ala Ser Phe Ala Phe 70 75 Met Leu Pro Val Ala Thr Pro Pro Asn Ala Ile Val Phe Thr Tyr Gly 85 90 His Leu Lys Val Ala Asp Met Val Lys Thr Gly Val Ile Met Asn Ile 105 Ile Gly Val Phe Cys Val Phe Leu Ala Val Asn Thr Trp Gly Arg Ala 125 120 Ile Phe Asp Leu Asp His Phe Pro Asp Trp Ala Asn Val Thr His Ile 135 Glu Thr 145 146

<210> 1188 <211> 40 <212>Amino acid <213> Homo sapiens

<210> 1189 <211> 62 <212>Amino acid <213> Homo sapiens

<210> 1190 <211> 623 <212>Amino acid <213> Homo sapiens

<400> 1190 Pro Leu Glu Gln Arg Ser Asn Cys Arg Val Asp Pro Arg Val Arg Thr 1.0 His Thr Met Ala Ser Asp Thr Ser Ser Leu Val Gln Ser His Thr Tyr Lys Lys Arg Glu Pro Ala Asp Val Pro Tyr Gln Thr Gly Gln Leu His 40 Pro Ala Ile Arg Val Ala Asp Leu Leu Gln His Ile Thr Gln Met Lys Cys Ala Glu Gly Tyr Gly Phe Lys Glu Glu Tyr Glu Ser Phe Phe Glu Gly Gln Ser Ala Pro Trp Asp Ser Ala Lys Lys Asp Glu Asn Arg Met 85 90 Lys Asn Arg Tyr Gly Asn Ile Ile Ala Tyr Asp His Ser Arg Val Arg 105 110 Leu Gln Thr Ile Glu Gly Asp Thr Asn Ser Asp Tyr Ile Asn Gly Asn 120 125 Tyr Ile Asp Gly Tyr His Arg Pro Asn His Tyr Ile Ala Thr Gln Gly 135 140 Pro Met Gln Glu Thr Ile Tyr Asp Phe Trp Arg Met Val Trp His Glu 150 155 Asn Thr Ala Ser Ile Ile Met Val Thr Asn Leu Val Glu Val Gly Arg 170 Val Lys Cys Cys Lys Tyr Trp Pro Asp Asp Thr Glu Ile Tyr Lys Asp 185 Ile Lys Val Thr Leu Ile Glu Thr Glu Leu Leu Ala Glu Tyr Val Ile 200 Arg Thr Phe Ala Val Glu Lys Arg Gly Val His Glu Ile Arg Glu Ile 215 220 Arg Gln Phe His Phe Thr Gly Trp Pro Asp His Gly Val Pro Tyr His 230 235 Ala Thr Gly Leu Leu Gly Phe Val Arg Gln Val Lys Ser Lys Ser Pro 245 250 Pro Ser Ala Gly Pro Leu Val Val His Cys Ser Ala Gly Ala Gly Arg 260 265 Thr Gly Cys Phe Ile Val Ile Asp Ile Met Leu Asp Met Ala Glu Arg 280 Glu Gly Val Val Asp Ile Tyr Asn Cys Val Arg Glu Leu Arg Ser Arg 295 300 Arg Val Asn Met Val Gln Thr Glu Glu Gln Tyr Val Phe Ile His Asp 305 315

Ala Ile Leu Glu Ala Cys Leu Cys Gly Asp Thr Ser Val Pro Ala Ser 330 Gln Val Arg Ser Leu Tyr Tyr Asp Met Asn Lys Leu Asp Pro Gln Thr 345 Asn Ser Ser Gln Ile Lys Glu Glu Phe Arg Thr Leu Asn Met Val Thr 360 Pro Thr Leu Arg Val Glu Asp Cys Ser Ile Ala Leu Leu Pro Arg Asn 375 380 His Glu Lys Asn Arg Cys Met Asp Ile Leu Pro Pro Asp Arg Cys Leu 390 395 Pro Phe Leu Ile Thr Ile Asp Gly Glu Ser Ser Asn Tyr Ile Asn Ala 410 Ala Leu Met Asp Ser Tyr Lys Gln Pro Ser Ala Phe Ile Val Thr Gln 425 His Pro Leu Pro Asn Thr Val Lys Asp Phe Trp Arg Leu Val Leu Asp 440 445 Tyr His Cys Thr Ser Val Val Met Leu Asn Asp Val Asp Pro Ala Gln 455 460 Leu Cys Pro Gln Tyr Trp Pro Glu Asn Gly Val His Arg His Gly Pro 470 475 Ile Gln Val Glu Phe Val Ser Ala Asp Leu Glu Glu Asp Ile Ile Ser 485 490 Arg Ile Phe Arg Ile Tyr Asn Ala Ala Arg Pro Gln Asp Gly Tyr Arg 505 Met Val Gln Gln Phe Gln Phe Leu Gly Trp Pro Met Tyr Arg Asp Thr 520 Pro Val Ser Lys Arg Ser Phe Leu Lys Leu Ile Arg Gln Val Asp Lys 535 Trp Gln Glu Glu Tyr Asn Gly Gly Glu Gly Arg Thr Val Val His Cys 555 550 Leu Asn Gly Gly Gly Arg Ser Gly Thr Phe Cys Ala Ile Ser Ile Val 565 570 Cys Glu Met Leu Arg His Gln Arg Thr Val Asp Val Phe His Ala Val 580 585 Lys Thr Leu Arg Asn Asn Lys Pro Asn Met Val Asp Leu Leu Asp Gln 600 Tyr Lys Phe Cys Tyr Glu Val Ala Leu Glu Tyr Leu Asn Ser Gly 610 615

<210> 1191 <211> 86 <212>Amino acid <213> Homo sapiens

<210> 1192 <211> 109 <212>Amino acid <213> Homo sapiens

<210> 1193 <211> 257 <212>Amino acid <213> Homo sapiens

<400> 1193 Cys Glu Glu Arg Glu Gln Glu Lys Asp Val Asp Val Ala Leu Leu Pro Thr Ile Val Glu Lys Val Ile Leu Pro Lys Leu Thr Val Ile Ala 20 25 Glu Asn Met Trp Asp Pro Phe Ser Thr Thr Gln Thr Ser Arg Met Val 40 Gly Ile Thr Leu Lys Leu Ile Asn Gly Tyr Pro Ser Val Val Asn Ala 55 60 Glu Asn Lys Asn Thr Gln Val Tyr Leu Lys Ala Leu Leu Leu Arg Met 75 Arg Arg Thr Leu Asp Asp Asp Val Phe Met Pro Leu Tyr Pro Lys Asn 85 90 Val Leu Glu Asn Lys Asn Ser Gly Pro Tyr Leu Phe Phe Gln Arg Gln 105 Phe Trp Ser Ser Val Lys Leu Leu Gly Asn Phe Leu Gln Trp Tyr Gly 120 Ile Phe Ser Asn Lys Thr Leu Gln Glu Leu Ser Ile Asp Gly Leu Leu 135 140 Asn Arg Tyr Ile Leu Met Ala Phe Gln Asn Ser Glu Tyr Gly Asp Asp 155 Ser Ile Lys Lys Ala Gln Asn Val Ile Asn Cys Phe Pro Lys Gln Trp 170 Phe Met Asn Leu Lys Gly Glu Arg Thr Ile Ser Gln Leu Glu Asn Phe 180 185 Cys Arg Tyr Leu Val His Leu Ala Asp Thr Ile Tyr Arg Asn Ser Ile 200 Gly Cys Ser Asp Val Glu Lys Arg Asn Ala Arg Glu Asn Ile Lys Gln

Ile Val Lys Leu Leu Ala Ser Val Arg Ala Leu Asp His Ala Met Ser 225 230 235 240 240 Val Ala Ser Asp His Asn Val Lys Glu Phe Lys Ser Leu Ile Glu Gly 245 250 250

Lys 257

> <210> 1194 <211> 416 <212>Amino acid <213> Homo sapiens

<400> 1194 Thr Pro Phe Cys Phe Leu Cys Ser Leu Val Phe Arg Ser Arg Val Trp 10 Ala Glu Pro Cys Leu Ile Asp Ala Ala Lys Glu Glu Tyr Asn Gly Val 25 Ile Glu Glu Phe Leu Ala Thr Gly Glu Lys Leu Phe Gly Pro Tyr Val 40 Trp Gly Arg Tyr Asp Leu Leu Phe Met Pro Pro Ser Phe Pro Phe Gly Gly Met Glu Asn Pro Cys Leu Thr Phe Val Thr Pro Cys Leu Leu Ala 70 75 Gly Asp Arg Ser Leu Ala Asp Val Ile Ile His Glu Ile Ser His Ser 85 Trp Phe Gly Asn Leu Val Thr Asn Ala Asn Trp Gly Glu Phe Trp Leu 105 Asn Glu Gly Phe Thr Met Tyr Ala Gln Arg Arg Ile Ser Thr Ile Leu 120 Phe Gly Ala Ala Tyr Thr Cys Leu Glu Ala Ala Thr Gly Arg Ala Leu 135 Leu Arg Gln His Met Asp Ile Thr Gly Glu Glu Asn Pro Leu Asn Lys 150 155 Leu Arg Val Lys Ile Glu Pro Gly Val Asp Pro Asp Asp Thr Tyr Asn 170 Glu Thr Pro Tyr Glu Lys Gly Phe Cys Phe Val Ser Tyr Leu Ala His 180 185 Leu Val Gly Asp Gln Asp Gln Phe Asp Ser Phe Leu Lys Ala Tyr Val 200 His Glu Phe Lys Phe Arg Ser Ile Leu Ala Asp Asp Phe Leu Asp Phe 215 Tyr Leu Glu Tyr Phe Pro Glu Leu Lys Lys Lys Arg Val Asp Ile Ile 230 235 Pro Gly Phe Glu Phe Asp Arg Trp Leu Asn Thr Pro Gly Trp Pro Pro 245 250 Tyr Leu Pro Asp Leu Ser Pro Gly Asp Ser Leu Met Lys Pro Ala Glu 265 Glu Leu Ala Gln Leu Trp Ala Ala Glu Glu Leu Asp Met Lys Ala Ile 280 Glu Ala Val Ala Ile Ser Pro Trp Lys Thr Tyr Gln Leu Val Tyr Phe 295 300 Leu Asp Lys Ile Leu Gln Lys Ser Pro Leu Pro Pro Gly Asn Val Lys 310 315 Lys Leu Gly Asp Thr Tyr Pro Ser Ile Ser Asn Ala Arg Asn Ala Glu 330 Leu Arg Leu Arg Trp Gly Gln Ile Val Leu Lys Asn Asp His Gln Glu 345 Asp Phe Trp Lys Val Lys Glu Phe Leu His Asn Gln Gly Lys Gln Lys 355 360

<210> 1195 <211> 295 <212>Amino acid <213> Homo sapiens

<400> 1195 Cys Ala Ser Gly Ser Ser Gly Trp Arg Pro Val Leu Trp Ala Gly Ala 10 Phe Thr Met Ala Ser Ala Glu Leu Asp Tyr Thr Ile Glu Ile Pro Asp 25 Gln Pro Cys Trp Ser Gln Lys Asn Ser Pro Ser Pro Gly Gly Lys Glu 35 40 Ala Glu Thr Arg Gln Pro Val Val Ile Leu Leu Gly Trp Gly Gly Cys 55 Lys Asp Lys Asn Leu Ala Lys Tyr Ser Ala Ile Tyr His Lys Arg Gly 70 75 Cys Ile Val Ile Arg Tyr Thr Ala Pro Trp His Met Val Phe Phe Ser 85 90 Glu Ser Leu Gly Ile Pro Ser Leu Arg Val Leu Ala Gln Lys Leu Leu 100 105 Glu Leu Leu Phe Asp Tyr Glu Ile Glu Lys Glu Pro Leu Leu Phe His 120 125 Val Phe Ser Asn Gly Gly Val Met Leu Tyr Arg Tyr Val Leu Glu Leu 135 140 Leu Gln Thr Arg Arg Phe Cys Arg Leu Arg Val Val Gly Thr Ile Phe 155 Asp Ser Ala Pro Gly Asp Ser Asn Leu Val Gly Ala Leu Arg Ala Leu 165 170 Ala Ala Ile Leu Glu Arg Arg Ala Ala Met Leu Arg Leu Leu Leu 185 Val Ala Phe Ala Leu Val Val Leu Phe His Val Leu Leu Ala Pro 200 Ile Thr Ala Leu Phe His Thr His Phe Tyr Asp Arg Leu Gln Asp Ala 215 Gly Ser Arg Trp Pro Glu Leu Tyr Leu Tyr Ser Arg Ala Asp Glu Val 230 235 Val Leu Ala Arg Asp Ile Glu Arg Met Val Glu Ala Arg Leu Ala Arg 245 250 Arg Val Leu Ala Arg Ser Val Asp Phe Val Ser Ser Ala His Val Ser 265 270 His Leu Arg Asp Tyr Pro Thr Tyr Tyr Thr Ser Leu Cys Val Asp Phe 280 275 Met Arg Asn Trp Val Arg Cys 290 295

<210> 1196 <211> 97 <212>Amino acid <213> Homo sapiens

<210> 1197 <211> 204 <212>Amino acid <213> Homo sapiens

<400> 1197 Gln Gly Arg Thr Ser Cys Ile Gly Leu Tyr Thr Tyr Gln Arg Arg Ile 5 10 Cys Lys Tyr Arg Asp Gln Tyr Asn Trp Phe Phe Leu Ala Arg Pro Thr 20 25 Thr Phe Ala Ile Ile Glu Asn Leu Lys Tyr Phe Leu Leu Lys Lys Asp 40 Pro Ser Gln Pro Phe Tyr Leu Gly His Thr Ile Lys Ser Gly Asp Leu 55 60 Glu Tyr Val Gly Met Glu Gly Gly Ile Val Leu Ser Val Glu Ser Met 75 Lys Arg Leu Asn Ser Leu Leu Asn Ile Pro Glu Lys Cys Pro Glu Gln 90 Gly Gly Met Ile Trp Lys Ile Ser Glu Asp Lys Gln Leu Ala Val Cys 100 105 Leu Lys Tyr Ala Gly Val Phe Ala Glu Asn Ala Glu Asp Ala Asp Gly · 115 120 125 Lys Asp Val Phe Asn Thr Lys Ser Val Gly Leu Ser Ile Lys Glu Ala 135 140 Met Thr Tyr His Pro Asn Gln Val Val Glu Gly Cys Cys Ser Asp Met 150 155 Ala Val Thr Phe Asn Gly Leu Thr Pro Asn Gln Met His Val Met Met 165 170 Tyr Gly Val Tyr Arg Leu Arg Ala Phe Gly His Ile Phe Asn Asp Ala 185 Leu Val Phe Leu Pro Pro Asn Gly Ser Asp Asn Asp 200

<210> 1198 <211> 238 <212>Amino acid <213> Homo sapiens

<400> 1198 His Glu Gly Lys Pro Thr Arg Gly Arg Gly Arg Gly Ser Leu Ser Thr Arg Gly Arg Gly Ser Glu Val Pro Asp Ser Ala His Leu Ala Pro 25 Thr Pro Leu Phe Ser Glu Ser Gly Cys Cys Gly Leu Arg Ser Arg Phe 40 Leu Thr Asp Cys Lys Met Glu Glu Gly Gly Asn Leu Gly Gly Leu Ile 55 Lys Met Val His Leu Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met 70 75 Trp Val Thr Phe Val Ser Gly Phe Leu Leu Phe Arg Ser Leu Pro Arg 85 90 His Thr Phe Gly Leu Val Gln Ser Lys Leu Phe Pro Phe Tyr Phe His 105 Ile Ser Met Gly Cys Ala Phe Ile Asn Leu Cys Ile Leu Ala Ser Gln 120 His Ala Trp Ala Gln Leu Thr Phe Trp Glu Ala Ser Gln Leu Tyr Leu 135 140 Leu Phe Leu Ser Leu Thr Leu Ala Thr Val Asn Ala Arg Trp Leu Glu 150 155 Pro Arg Thr Thr Ala Ala Met Trp Ala Leu Gln Thr Val Glu Lys Glu 165 170 Arg Gly Leu Gly Gly Glu Val Pro Gly Ser His Gln Gly Pro Asp Pro 185 Tyr Arg Gln Leu Arg Glu Lys Asp Pro Lys Tyr Ser Ala Leu Arg Gln 200 Asn Phe Phe Arg Tyr His Gly Leu Ser Ser Leu Cys Asn Leu Gly Cys 215 220 Val Leu Ser Asn Gly Leu Cys Leu Ala Ala Leu Pro Trp Lys 230

<210> 1199 <211> 100 <212>Amino acid <213> Homo sapiens

<210> 1200 <211> 194 <212>Amino acid <213> Homo sapiens

<400> 1200 Arg Asn Gln Leu Ser Ser Gln Lys Ser Val Pro Trp Val Pro Ile Leu 5 . 10 Lys Ser Leu Pro Leu Trp Ala Ile Val Val Ala His Phe Ser Tyr Asn 25 Trp Thr Phe Tyr Thr Leu Leu Thr Leu Leu Pro Thr Tyr Met Lys Glu 40 45 Ile Leu Arg Phe Asn Val Gln Glu Asn Gly Phe Leu Ser Ser Leu Pro 5.5 Tyr Leu Gly Ser Trp Leu Cys Met Ile Leu Ser Gly Gln Ala Ala Asp Asn Leu Arg Ala Lys Trp Asn Phe Ser Thr Leu Cys Val Arg Arg Ile 90 Phe Ser Leu Ile Gly Met Ile Gly Pro Ala Val Phe Leu Val Ala Ala 100 105 Gly Phe Ile Gly Cys Asp Tyr Ser Leu Ala Val Ala Phe Leu Thr Ile 120 Ser Thr Thr Leu Gly Gly Phe Cys Ser Ser Gly Phe Ser Ile Asn His 135 Leu Asp Ile Ala Pro Ser Tyr Ala Gly Ile Leu Leu Gly Ile Thr Asn 150 Thr Phe Ala Thr Ile Pro Gly Met Val Gly Pro Val Ile Ala Lys Ser 165 170 Leu Thr Pro Asp Met Gly Ile Ser Leu His Arg Pro Gly Trp Ser Ala Val Ala 194

<210> 1201 <211> 119 <212>Amino acid <213> Homo sapiens

<400> 1201 Gly Pro Ser Gly Thr Thr His Ala Ser Ala His Ser Gly His Pro Gly Ser Pro Arg Gly Ser Leu Ser Arg His Pro Ser Ser Gln Leu Ala Gly 25 Pro Gly Val Glu Gly Glu Gly Thr Gln Lys Pro Arg Asp Tyr Ile 40 Ile Leu Ala Ile Leu Ser Cys Phe Cys Pro Met Trp Pro Val Asn Ile 55 Val Ala Phe Ala Tyr Ala Val Met Ser Arg Asn Ser Leu Gln Gln Gly 70 Asp Val Asp Gly Ala Gln Arg Leu Gly Arg Val Ala Lys Leu Leu Ser 90 Ile Val Ala Leu Val Gly Gly Val Leu Ile Ile Ile Ala Ser Cys Val 100 105 Ile Asn Leu Gly Val Tyr Lys 115 119

<210> 1202 <211> 66 <212>Amino acid <213> Homo sapiens

<210> 1203 <211> 509 <212>Amino acid <213> Homo sapiens

<400> 1203 Asp Asp Val Pro Pro Pro Ala Pro Asp Leu Tyr Asp Val Pro Pro Gly Leu Arg Arg Pro Gly Pro Gly Thr Leu Tyr Asp Val Pro Arg Glu Arg Val Leu Pro Pro Glu Val Ala Asp Gly Gly Val Val Asp Ser Gly Val Tyr Ala Val Pro Pro Pro Ala Glu Arg Glu Ala Pro Ala Glu Gly Lys Arg Leu Ser Ala Ser Ser Thr Gly Ser Thr Arg Ser Ser Gln Ser Ala 75 Ser Ser Leu Glu Val Ala Gly Pro Gly Arg Glu Pro Leu Glu Leu Glu 90 Val Ala Val Glu Ala Leu Ala Arg Leu Gln Gln Gly Val Ser Ala Thr 105 Val Ala His Leu Leu Asp Leu Ala Gly Ser Ala Gly Ala Thr Gly Ser 120 Trp Arg Ser Pro Ser Glu Pro Gln Glu Pro Leu Val Gln Asp Leu Gln 135 140 Ala Ala Val Ala Val Gln Ser Ala Val His Glu Leu Leu Glu Phe 150 155 Ala Arg Ser Ala Val Gly Asn Ala Ala His Thr Ser Asp Arg Ala Leu 170 His Ala Lys Leu Ser Arg Gln Leu Gln Lys Met Glu Asp Val His Gln 185 190 Thr Leu Val Ala His Gly Gln Ala Leu Asp Ala Gly Arg Gly Gly Ser 200 Gly Ala Thr Leu Glu Asp Leu Asp Arg Leu Val Ala Cys Ser Arg Ala 215 220 Val Pro Glu Asp Ala Lys Gln Leu Ala Ser Phe Leu His Gly Asn Ala 230 235

. Ser Leu Leu Phe Arg Arg Thr Lys Ala Thr Ala Pro Gly Pro Glu Gly 245 250 Gly Gly Thr Leu His Pro Asn Pro Thr Asp Lys Thr Ser Ser Ile Gln · 265 260 270 Ser Arg Pro Leu Pro Ser Pro Pro Lys Phe Thr Ser Gln Asp Ser Pro 280 Asp Gly Gln Tyr Glu Asn Ser Glu Gly Gly Trp Met Glu Asp Tyr Asp 295 Tyr Val His Leu Gln Gly Lys Glu Glu Phe Glu Lys Thr Gln Lys Glu 310 Leu Leu Glu Lys Gly Ser Ile Thr Arg Gln Gly Lys Ser Gln Leu Glu 325 330 Leu Gln Gln Leu Lys Gln Phe Glu Arg Leu Glu Gln Glu Val Ser Arg 340 345 Pro Ile Asp His Asp Leu Ala Asn Trp Thr Pro Ala Gln Pro Leu Ala 360 Pro Gly Arg Thr Gly Gly Leu Gly Pro Ser Asp Arg Gln Leu Leu 375 380 Phe Tyr Leu Glu Gln Cys Glu Ala Asn Leu Thr Thr Leu Thr Asn Ala 390 395 Val Asp Ala Phe Phe Thr Ala Val Ala Thr Asn Gln Pro Pro Lys Ile 405 41.0 Phe Val Ala His Ser Lys Phe Val Ile Leu Ser Ala His Lys Leu Val 425 Phe Ile Gly Asp Thr Leu Ser Arg Gln Ala Lys Ala Ala Asp Val Arg 440 Ser Gln Val Thr His Tyr Ser Asn Leu Leu Cys Asp Leu Leu Arg Gly 455 Ile Val Ala Thr Thr Lys Ala Ala Ala Leu Gln Tyr Pro Ser Pro Ser 470 475 Ala Ala Gln Asp Met Val Glu Arg Val Lys Glu Leu Gly His Ser Thr 485 490 Gln Gln Phe Arg Arg Val Leu Gly Gln Leu Ala Ala Ala 500 505

<210> 1204 <211> 453 <212>Amino acid <213> Homo sapiens

<221> misc_feature <222> (1)...(453)

<220>

<223> X = any amino acid or stop code

100 105 Ile Val Gln Ser Leu Ala Ala Phe Gln Lys Tyr Gly Asn Asp Gln Ile 120 Pro Leu Ala Pro Asn Thr Gly Arg Ala Asn Gln Gln Met Gly Gly Gly . 135 Phe Phe Ser Gly Val Leu Thr Ala Leu Thr Gly Val Ala Val Leu 150 155 Leu Val Tyr His Trp Ser Ser Arg Glu Ser Glu His Asp Leu Leu Val 165 170 His Lys Ala Val Ala Lys Trp Thr Ala Glu Glu Val Val Leu Trp Leu 180 185 Glu Gln Leu Gly Pro Trp Ala Ser Leu Tyr Arg Glu Arg Phe Leu Ser 200 Glu Arg Val Asn Gly Arg Leu Leu Leu Thr Leu Thr Glu Glu Glu Phe 220 215 Ser Lys Thr Pro Tyr Thr Ile Glu Asn Ser Ser His Arg Arg Ala Ile 230 235 Leu Met Glu Leu Glu Arg Val Lys Ala Leu Gly Val Lys Pro Pro Gln 250 245 Asn Leu Trp Glu Tyr Lys Ala Val Asn Pro Gly Arg Ser Leu Phe Leu 265 Leu Tyr Ala Leu Lys Ser Ser Pro Arg Leu Ser Leu Leu Tyr Leu Tyr 280 Leu Phe Asp Tyr Thr Asp Thr Phe Leu Pro Phe Ile His Thr Ile Cys 295 300 Pro Leu Gln Glu Asp Ser Ser Gly Glu Asp Ile Val Thr Lys Leu Leu 310 Asp Leu Lys Glu Pro Thr Trp Lys Gln Trp Arg Glu Phe Leu Val Lys 325 330 Tyr Ser Phe Leu Pro Tyr Gln Leu Ile Ala Glu Phe Ala Trp Asp Trp 340 345 Leu Glu Val His Tyr Trp Thr Ser Arg Phe Leu Ile Ile Asn Ala Met 360 Leu Leu Ser Val Leu Glu Leu Phe Ser Phe Trp Arg Ile Trp Ser Arg 375 380 Ser Glu Leu Lys Xaa Val Gly Phe Arg Phe Leu Arg Leu Gly Val Ala 390 395 Ala Leu Gly Ser Val Glu Val Ala Gly Leu Arg Gly Val Val Lys Gly 410 . Glu Arg Pro Leu Leu Tyr Gly His Gly Ala Gly Ala Arg Phe Pro His 425 Ser Val Leu Leu Pro Val Ala Lys Pro Leu Pro Leu Pro Leu Leu 435 Pro Arg Gly Leu Cys 450 453

<210> 1205 <211> 80 <212>Amino acid <213> Homo sapiens

50 55 60

Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser Glu Ser
65 70 75 80

<210> 1206 <211> 205 <212>Amino acid <213> Homo sapiens

<400> 1206 Leu Tyr Tyr Ser Gln Asp Glu Glu Ser Lys Ile Met Ile Ser Asp Phe 10 Gly Leu Ser Lys Met Glu Gly Lys Gly Asp Val Met Ser Thr Ala Cys 25 Gly Thr Pro Gly Tyr Val Ala Pro Glu Val Leu Ala Gln Lys Pro Tyr 40 Ser Lys Ala Val Asp Cys Trp Ser Ile Gly Val Ile Ala Tyr Ile Leu 55 Leu Cys Gly Tyr Pro Pro Phe Tyr Asp Glu Asn Asp Ser Lys Leu Phe 70 Glu Gln Ile Leu Lys Ala Glu Tyr Glu Phe Asp Ser Pro Tyr Trp Asp 90 Asp Ile Ser Asp Ser Ala Lys Asp Phe Ile Arg Asn Leu Met Glu Lys 100 105 Asp Pro Asn Lys Arg Tyr Thr Cys Glu Gln Ala Ala Arg His Pro Trp 120 125 Ile Ala Gly Asp Thr Ala Leu Asn Lys Asn Ile His Glu Ser Val Ser 135 140 Ala Gln Ile Arg Lys Asn Phe Ala Lys Ser Lys Trp Arg Gln Ala Phe 150 155 Asn Ala Thr Ala Val Val Arg His Met Arg Lys Leu His Leu Gly Ser 165 170 Ser Leu Asp Ser Ser Asn Ala Ser Val Ser Ser Ser Leu Ser Leu Ala 180 185 Ser Gln Lys Asp Cys Ala Ser Gly Thr Phe His Ala Leu . 200

<210> 1207 <211> 117 · <212>Amino acid <213> Homo sapiens

<210> 1208 <211> 337 <212>Amino acid <213> Homo sapiens

<400> 1208 Pro Arg Ser Pro Glu His His Thr Pro Ala Trp His Glu Gly Arg Ser 10 Leu Gly Pro Ile Met Ala Ser Met Ala Asp Arg Asn Met Lys Leu Phe Ser Gly Arg Val Val Pro Ala Gln Gly Glu Glu Thr Phe Glu Asn Trp 40 Leu Thr Gln Val Asn Gly Val Leu Pro Asp Trp Asn Met Ser Glu Glu Glu Lys Leu Lys Arg Leu Met Lys Thr Leu Arg Gly Pro Ala Arg Glu Val Met Arg Val Leu Gln Ala Thr Asn Pro Asn Leu Ser Val Ala Asp 85 Phe Leu Arg Ala Met Lys Leu Val Phe Gly Glu Ser Glu Ser Ser Val 100 Thr Ála His Gly Lys Phe Phe Asn Thr Leu Gln Ala Gln Gly Glu Lys 120 Ala Ser Leu Tyr Val Ile Arg Leu Glu Val Gln Leu Gln Asn Ala Ile 135 140 Gln Ala Gly Ile Ile Ala Glu Lys Asp Ala Asn Arg Thr Arg Leu Gln 150 155 Gln Leu Leu Gly Gly Glu Leu Ser Arg Asp Leu Arg Leu Arg Leu 170 175 Lys Asp Phe Leu Arg Met Tyr Ala Asn Glu Glu Arg Leu Pro Asn 185 Phe Leu Glu Leu Ile Lys Met Val Arg Glu Glu Glu Asp Trp Asp Asp 200 Ala Phe Ile Lys Arg Lys Arg Pro Lys Arg Ser Glu Ser Met Val Glu 215 220 Arg Ala Val Ser Pro Val Ala Phe Gln Gly Ser Pro Pro Ile Val Ile 235 240 230 Gly Ser Ala Asp Cys Asn Val Ile Glu Ile Asp Asp Thr Leu Asp Asp Ser Asp Glu Asp Val Ile Leu Val Glu Ser Gln Asp Pro Pro Leu Pro 260 265 Ser Trp Gly Ala Pro Pro Leu Arg Asp Arg Ala Arg Pro Gln Asp Glu 280 Val Leu Val Ile Asp Ser Pro His Asn Ser Arg Ala Gln Phe Pro Ser 295 300 , Thr Ser Gly Gly Ser Gly Tyr Lys Asn Asn Gly Pro Gly Glu Met Arg 310 315 Arg Ala Arg Lys Arg Lys His Thr Ile Arg Cys Ser Tyr Cys Gly Glu 330 337

<210> 1209 <211> 64 <212>Amino acid <213> Homo sapiens

<210> 1210 <211> 316 <212>Amino acid <213> Homo sapiens

<400> 1210 Tyr Ser Ala Val Glu Phe Ala Glu Arg Gly Ser Gly Gly Ser Ser Gly Asp Glu Leu Arg Glu Asp Asp Glu Pro Val Lys Lys Arg Gly Arg Lys Gly Arg Gly Arg Gly Pro Pro Ser Ser Ser Asp Ser Glu Pro Glu Ala 40 Glu Leu Glu Arg Glu Ala Lys Lys Ser Ala Lys Lys Pro Gln Ser Ser 55 Ser Thr Glu Pro Ala Arg Lys Pro Gly Gln Lys Glu Lys Arg Val Arg Pro Glu Glu Lys Gln Gln Ala Lys Pro Val Lys Val Glu Arg Thr Arg 90 Lys Arg Ser Glu Gly Phe Ser Met Asp Arg Lys Val Glu Lys Lys 105 Glu Pro Ser Val Glu Glu Lys Leu Gln Lys Leu His Ser Glu Ile Lys . 120 125 Phe Ala Leu Lys Val Asp Ser Pro Asp Val Lys Arg Cys Leu Asn Ala 140 Leu Glu Glu Leu Gly Thr Leu Gln Val Thr Ser Gln Ile Leu Gln Lys 150 155 Asn Thr Asp Val Val Ala Thr Leu Lys Lys Ile Arg Arg Tyr Lys Ala 165 170 Asn Lys Asp Val Met Glu Lys Ala Ala Glu Val Tyr Thr Arg Leu Lys 185 Ser Arg Val Leu Gly Pro Lys Ile Glu Ala Val Gln Lys Val Asn Lys 200 Ala Gly Met Glu Lys Glu Lys Ala Glu Glu Lys Leu Ala Gly Glu Glu 215 220 Leu Ala Gly Glu Glu Ala Pro Gln Glu Lys Ala Glu Asp Lys Pro Ser 230 235 Thr Asp Leu Ser Ala Pro Val Asn Gly Glu Ala Thr Ser Gln Lys Gly

Glu Ser Ala Glu Asp Lys Glu His Glu Glu Gly Arg Asp Ser Glu Glu Gly Pro Arg Cys Gly Ser Ser Glu Asp Leu His Asp Leu His Asp Ser Val Arg Glu Arg Pro Asp Leu Asp Arg Pro Gly Ser Asp Arg Gln Glu Arg 295

Ala Arg Gly Asp Ser Glu Ala Leu Asp Glu Glu Ser 315 316

<210> 1211 <211> 767 <212>Amino acid <213> Homo sapiens

<400> 1211 Leu Ala Glu Leu Ser Ser Leu Ser Val Leu Arg Leu Ser His Asn Ser 10 Ile Ser His Ile Ala Glu Gly Ala Phe Lys Gly Leu Arg Ser Leu Arg 25 Val Leu Asp Leu Asp His Asn Glu Ile Ser Gly Thr Ile Glu Asp Thr 40 Ser Gly Ala Phe Ser Gly Leu Asp Ser Leu Ser Lys Leu Thr Leu Phe 55 Gly Asn Lys Ile Lys Ser Val Ala Lys Arg Ala Phe Ser Gly Leu Glu 70 Gly Leu Glu His Leu Asn Leu Gly Gly Asn Ala Ile Arg Ser Val Gln 85 90 Phe Asp Ala Phe Val Lys Met Lys Asn Leu Lys Glu Leu His Ile Ser 105 110 Ser Asp Ser Phe Leu Cys Asp Cys Gln Leu Lys Trp Leu Pro Pro Trp 120 125 Leu Ile Gly Arg Met Leu Gln Ala Phe Val Thr Ala Thr Cys Ala His 135 140 Pro Glu Ser Leu Lys Gly Gln Ser Ile Phe Ser Val Pro Pro Glu Ser 150 155 160 Phe Val Cys Asp Asp Phe Leu Lys Pro Gln Ile Ile Thr Gln Pro Glu 165 170 Thr Thr Met Ala Met Val Gly Lys Asp Ile Arg Phe Thr Cys Ser Ala 190 185 Ala Ser Ser Ser Ser Pro Met Thr Phe Ala Trp Lys Lys Asp Asn 200 205 Glu Val Leu Thr Asn Ala Asp Met Glu Asn Phe Val His Val His Ala 215 Gln Asp Gly Glu Val Met Glu Tyr Thr Thr Ile Leu His Leu Arg Gln 230 235 Val Thr Phe Gly His Glu Gly Arg Tyr Gln Cys Val Ile Thr Asn His 250 Phe Gly Ser Thr Tyr Ser His Lys Ala Arg Leu Thr Val Asn Val Leu 265 Pro Ser Phe Thr Lys Thr Pro His Asp Ile Thr Ile Arg Thr Thr 280 Met Ala Arg Leu Glu Cys Ala Ala Thr Gly His Pro Asn Pro Gln Ile 295 300 Ala Trp Gln Lys Asp Gly Gly Thr Asp Phe Pro Ala Ala Arg Glu Arg 310 315 Arg Met His Val Met Pro Asp Asp Val Phe Phe Ile Thr Asp Val 325 330 Lys Ile Asp Asp Ala Gly Val Tyr Ser Cys Thr Ala Gln Asn Ser Ala

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340
                                345
 Gly Ser Ile Ser Ala Asn Ala Thr Leu Thr Val Leu Glu Thr Pro Ser
                            360
 Leu Val Val Pro Leu Glu Asp Arg Val Val Ser Val Gly Glu Thr Val
                        375
Ala Leu Gln Cys Lys Ala Thr Gly Asn Pro Pro Pro Arg Ile Thr Trp
                    390
                                        395
Phe Lys Gly Asp Arg Pro Leu Ser Leu Thr Glu Arg His His Leu Thr
                                    410
Pro Asp Asn Gln Leu Leu Val Val Gln Asn Val Val Ala Glu Asp Ala
                                425
Gly Arg Tyr Thr Cys Glu Met Ser Asn Thr Leu Gly Thr Glu Arg Ala
                            440
His Ser Gln Leu Ser Val Leu Pro Ala Ala Gly Cys Arg Lys Asp Gly
                       455
                                           460
Thr Thr Val Gly Ile Phe Thr Ile Ala Val Val Ser Ser Ile Val Leu
                    470
                                       475
Thr Ser Leu Val Trp Val Cys Ile Ile Tyr Gln Thr Arg Lys Lys Ser
               485
                                   490
Glu Glu Tyr Ser Val Thr Asn Thr Asp Glu Thr Val Val Pro Pro Asp
           500
                                505
Val Pro Ser Tyr Leu Ser Ser Gln Gly Thr Leu Ser Asp Arg Gln Glu
                           520
Thr Val Val Arg Thr Glu Gly Gly Pro Gln Ala Asn Gly His Ile Glu
                       535
Ser Asn Gly Val Cys Pro Arg Asp Ala Ser His Phe Pro Glu Pro Asp
                   550
                                       555
Thr His Ser Val Ala Cys Arg Gln Pro Lys Leu Cys Ala Gly Ser Ala
               565
                                   570
Tyr His Lys Lys Pro Trp Lys Ala Met Glu Lys Ala Glu Gly Thr Pro
                               585
Gly Pro His Lys Met Glu His Gly Gly Arg Val Val Cys Ser Asp Cys
                           600
                                               605
Asn Thr Glu Val Asp Cys Tyr Ser Arg Gly Gln Ala Phe His Pro Gln
                       615
                                          620
Pro Val Ser Arg Asp Ser Ala Gln Pro Ser Ala Pro Asn Gly Pro Glu
                   630
                                      635
Pro Gly Gly Ser Asp Gln Glu His Ser Pro His His Gln Cys Ser Arg
               645
                                  650
Thr Ala Ala Gly Ser Cys Pro Glu Cys Gln Gly Ser Leu Tyr Pro Ser
           660
                               665
Asn His Asp Arg Met Leu Thr Ala Val Lys Lys Lys Pro Met Ala Ser
                           680
Leu Asp Gly Lys Gly Asp Ser Ser Trp Thr Leu Ala Arg Leu Tyr His
                      695
Pro Asp Ser Thr Glu Leu Gln Pro Ala Ser Ser Leu Thr Ser Gly Ser
                   710
                                       715
Pro Glu Arg Ala Glu Ala Gln Tyr Leu Leu Val Ser Asn Gly His Leu
               725
                                  730
Pro Lys Ala Cys Asp Ala Ser Pro Glu Ser Thr Pro Leu Thr Gly Gln
                              745
Leu Pro Gly Lys Gln Arg Val Pro Leu Leu Leu Ala Pro Lys Ser
                           760
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<210> 1212 <211> 821 <212>Amino acid <213> Homo sapiens

<400> 1212 Ala Ala Ala Gly Ala Ala Arg Arg Val Ser Val Arg Cys Gly Arg Ser 10 Gly Pro Gly Pro Gly Arg Gly Ala Ala Gly Leu Ser Pro Ala Asp Ile 25 Ala Leu Ala Ser Glu Gln Gly Ala Ser Cys Ser Val Arg Ala Pro Glu 40 Arg Lys Leu Arg Met Lys Leu Leu Trp Gln Ala Lys Met Ser Ser Ile Gln Asp Trp Gly Glu Glu Val Glu Glu Gly Ala Val Tyr His Val Thr Leu Lys Arg Val Gln Ile Gln Gln Ala Ala Asn Lys Gly Ala Arg Trp Leu Gly Val Glu Gly Asp Gln Leu Pro Pro Gly His Thr Val Ser Gln 100 105 Tyr Glu Thr Cys Lys Ile Arg Thr Ile Lys Ala Gly Thr Leu Glu Lys 120 Leu Val Glu Asn Leu Leu Thr Ala Phe Gly Asp Asn Asp Phe Thr Tyr 135 140 Ile Ser Ile Phe Leu Ser Thr Tyr Arg Gly Phe Ala Ser Thr Lys Glu 150 155 Val Leu Glu Leu Leu Asp Arg Tyr Gly Asn Leu Thr Ser Pro Asn 165 170 Cys Glu Glu Asp Gly Ser Gln Ser Ser Glu Ser Lys Met Val Ile 180 185 Arg Asn Ala Ile Ala Ser Ile Leu Arg Ala Trp Leu Asp Gln Cys Ala 200 Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys Leu Gln Lys Leu Leu 215 220 Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp Pro Glu Arg Arg Ala 230 235 Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu Val Glu Thr Asp Asn 245 250 Gly Leu Pro Asn Thr Ile Ser Phe Ser Leu Glu Glu Glu Glu Leu 265 Glu Gly Gly Glu Ser Ala Glu Phe Thr Cys Phe Ser Glu Asp Leu Val 275 280 Ala Glu Gln Leu Thr Tyr Met Asp Ala Gln Leu Phe Lys Lys Val Val 295 300 Pro His His Cys Leu Gly Cys Ile Trp Ser Arg Arg Asp Lys Lys Glu 310 315 Asn Lys His Leu Ala Pro Thr Ile Arg Ala Thr Ile Ser Gln Phe Asn 325 Thr Leu Thr Lys Cys Val Val Ser Thr Ile Leu Gly Gly Lys Glu Leu 340 345 Lys Thr Gln Gln Arg Ala Lys Ile Ile Glu Lys Trp Ile Asn Ile Ala 360 His Glu Cys Arg Leu Leu Lys Asn Phe Ser Ser Leu Arg Ala Ile Val 375 Ser Ala Leu Gln Ser Asn Ser Ile Tyr Arg Leu Lys Lys Thr Trp Ala 390 395 Ala Val Pro Arg Asp Arg Met Leu Met Phe Glu Glu Leu Ser Asp Ile 405 410 Phe Ser Asp His Asn Asn His Leu Thr Ser Arg Glu Leu Leu Met Lys 425 Glu Gly Thr Ser Lys Phe Ala Asn Leu Asp Ser Ser Val Lys Glu Asn 440 Gln Lys Arg Thr Gln Arg Arg Leu Gln Leu Gln Lys Asp Met Gly Val 455 Met Gln Gly Thr Val Pro Tyr Leu Gly Thr Phe Leu Thr Asp Leu Thr 470 475 Met Leu Asp Thr Ala Leu Gln Asp Tyr Ile Glu Gly Gly Leu Ile Asn 490 Phe Glu Lys Arg Arg Glu Phe Glu Val Ile Ala Gln Ile Lys Leu

500 505 510 Leu Gln Ser Ala Cys Asn Ser Tyr Cys Met Thr Pro Asp Gln Lys Phe 520 525 Ile Gln Trp Phe Gln Arg Gln Gln Leu Leu Thr Glu Glu Glu Ser Tyr 535 Ala Leu Ser Cys Glu Ile Glu Ala Ala Ala Asp Ala Ser Thr Thr Ser 550 555 Pro Lys Pro Trp Lys Ser Met Val Lys Arg Leu Asn Leu Leu Phe Leu 565 ' 570 Gly Ala Asp Met Ile Thr Ser Pro Thr Pro Thr Lys Glu Gln Pro Lys 585 Ser Thr Ala Ser Gly Ser Ser Gly Glu Ser Met Asp Ser Val Ser Val 600 Ser Ser Cys Glu Ser Asn His Ser Glu Ala Glu Glu Gly Tyr Ile Thr 615 620 Pro Met Asp Thr Pro Asp Glu Pro Gln Lys Lys Leu Ser Glu Ser Ser 630 635 Ser Tyr Cys Ser Ser Ile His Ser Met Asp Thr Asn Phe Leu Gln Gly 650 Met Ser Ser Leu Ile Asn Pro Leu Ser Ser Pro Pro Ser Cys Asn Asn 665 670 Asn Pro Lys Ile His Lys Arg Ser Val Ser Val Thr Ser Ile Thr Ser 680 Thr Val Leu Pro Pro Val Tyr Asn Gln Gln Asn Glu Asp Thr Cys Ile 695 700 Ile Arg Ile Ser Val Glu Asp Asn Asn Gly Asn Met Tyr Lys Ser Ile 710 715 Met Leu Thr Ser Gln Asp Lys Thr Pro Ala Val Ile Gln Arg Ala Met 725 730 Leu Lys His Asn Leu Asp Ser Asp Pro Ala Glu Glu Tyr Glu Leu Val 740 745 Gln Val Ile Ser Glu Asp Lys Glu Leu Val Ile Pro Asp Ser Ala Asn 760 Val Phe Tyr Ala Met Asn Ser Gln Val Asn Phe Asp Phe Ile Leu Arg 775 780 Lys Lys Asn Ser Met Glu Glu Gln Val Lys Leu Arg Ser Arg'Thr Ser 790 795 Leu Thr Leu Pro Arg Thr Ala Lys Arg Gly Cys Trp Ser Asn Arg His 805 810 Ser Lys Ile Thr Leu 820 821

<210> 1213 <211> 289 <212>Amino acid <213> Homo sapiens

 400> 1213

 Ala Arg Glu Lys
 Met Asp Ser Cys Ile Glu Ala Phe Gly Thr Thr Lys

 1
 5
 10
 10
 15

 Gln Lys
 Arg Ala Leu Asn Thr Arg Arg Met Asn Arg Val Gly Asn Glu
 20
 25
 30

 Ser Leu Asn Arg Ala Val Ala Lys Ala Ala Glu Thr Ile Ile Asp Thr
 35
 40
 45

 Lys Gly Val Thr Ala Leu Val Ser Asp Ala Ile His Asn Asp Leu Gln
 50
 60

 Asp Asp Ser Leu Tyr Leu Pro Pro Cys Tyr Asp Asp Ala Ala Lys Pro
 65
 75

 65
 70
 75
 80

 Glu Asp Val Tyr Lys Phe Glu Asp Leu Leu Ser Pro Ala Glu Tyr Glu

85 90 Ala Leu Gln Ser Pro Ser Glu Ala Phe Arg Asn Val Thr Ser Glu Glu 100 105 Ile Leu Lys Met Ile Glu Glu Asn Ser His Cys Thr Phe Val Ile Glu 115 120 Ala Leu Lys Ser Leu Pro Ser Asp Val Glu Ser Arg Asp Arg Gln Ala 135 140 Arg Cys Ile Trp Phe Leu Asp Thr Leu Ile Lys Phe Arg Ala His Arg 150 155 Val Val Lys Arg Lys Ser Ala Leu Gly Pro Gly Val Pro His Ile Ile 165 170 Asn Thr Lys Leu Leu Lys His Phe Thr Cys Leu Thr Tyr Asn Asn Gly 185 Arg Leu Arg Asn Leu Ile Ser Asp Ser Met Lys Ala Lys Ile Thr Ala 200 Tyr Val Ile Ile Leu Ala Leu His Ile His Asp Phe Gln Ile Asp Leu 215 220 Thr Val Leu Gln Arg Asp Leu Lys Leu Ser Glu Lys Arg Met Met Glu 230 235 Ile Ala Lys Ala Met Arg Leu Lys Ile Ser Lys Arg Arg Val Ser Val 250 Ala Ala Gly Ser Glu Glu Asp His Lys Leu Gly Thr Leu Ser Leu Pro 265 Leu Pro Pro Ala Gln Thr Ser Asp Arg Leu Ala Lys Arg Arg Lys Ile 280 Thr 289

<210> 1214 <211> 873 <212>Amino acid <213> Homo sapiens

<400> 1214

Leu Ser Leu Phe Gly Ser Arg Ala Leu Gly Arg Ser Gly Ala Arg Ala 5 Met Ala Lys Ala Lys Lys Val Gly Ala Arg Arg Lys Ala Ser Gly Ala 25 Pro Ala Gly Ala Arg Gly Gly Pro Ala Lys Ala Asn Ser Asn Pro Phe 40 Glu Val Lys Val Asn Arg Gln Lys Phe Gln Ile Leu Gly Arg Lys Thr 55 Arg His Asp Val Gly Leu Pro Gly Val Ser Arg Ala Arg Ala Leu Arg 70 75 Lys Arg Thr Gln Thr Leu Leu Lys Glu Tyr Lys Glu Arg Asp Lys Ser 85 90 Asn Val Phe Arg Asp Lys Arg Phe Gly Glu Tyr Asn Ser Asn Met Ser 105 Pro Glu Glu Lys Met Met Lys Arg Phe Ala Leu Glu Gln Gln Arg His 120 His Glu Lys Lys Ser Ile Tyr Asn Leu Asn Glu Asp Glu Glu Leu Thr 135 140 His Tyr Gly Gln Ser Leu Ala Asp Ile Glu Lys His Asn Asp Ile Val 150 155 Asp Ser Asp Ser Asp Ala Glu Asp Arg Gly Thr Leu Ser Gly Glu Leu 170 Thr Ala Ala His Phe Gly Gly Gly Gly Leu Leu His Lys Lys Thr 185 Gln Gln Glu Gly Glu Glu Arg Glu Lys Pro Lys Ser Arg Lys Glu Leu

195 200 205 Ile Glu Glu Leu Ile Ala Lys Ser Lys Gln Glu Lys Arg Glu Arg Gln 215 220 Ala Gln Arg Glu Asp Ala Leu Glu Leu Thr Glu Lys Leu Asp Gln Asp 230 235 Trp Lys Glu Ile Gln Thr Leu Leu Ser His Lys Thr Pro Lys Ser Glu 245 250 Asn Arg Asp Lys Lys Glu Lys Pro Lys Pro Asp Ala Tyr Asp Met Met 265 Val Arg Glu Leu Gly Phe Glu Met Lys Ala Gln Pro Ser Asn Arg Met 280 Lys Thr Glu Ala Glu Leu Ala Lys Glu Glu Glu His Leu Arg Lys 295 300 Leu Glu Ala Glu Arg Leu Arg Arg Met Leu Gly Lys Asp Glu Asp Glu 315 Asn Val Lys Lys Pro Lys His Met Ser Ala Asp Asp Leu Asn Asp Gly 325 330 Phe Val Leu Asp Lys Asp Asp Arg Leu Leu Ser Tyr Lys Asp Gly 345 Lys Met Asn Val Glu Glu Asp Val Gln Glu Glu Gln Ser Lys Glu Ala 360 Ser Asp Pro Glu Ser Asn Glu Glu Glu Gly Asp Ser Ser Gly Gly Glu 375 380 Asp Thr Glu Glu Ser Asp Ser Pro Asp Ser His Leu Asp Leu Glu Ser 390 395 Asn Val Glu Ser Glu Glu Glu Asn Glu Lys Pro Ala Lys Glu Gln Arg 405 410 Gln Thr Pro Gly Lys Gly Leu Ile Ser Gly Lys Glu Arg Ala Gly Lys 420 425 Ala Thr Arg Asp Glu Leu Pro Tyr Thr Phe Ala Ala Pro Glu Ser Tyr 440 Glu Glu Leu Arg Ser Leu Leu Gly Arg Ser Met Glu Glu Gln Leu 455 Leu Val Val Glu Arg Ile Gln Lys Cys Asn His Pro Ser Leu Ala Glu 475 Gly Asn Lys Ala Lys Leu Glu Lys Leu Phe Gly Phe Leu Leu Glu Tyr 485 490 Val Gly Asp Leu Ala Thr Asp Asp Pro Pro Asp Leu Thr Val Ile Asp 505 Lys Leu Val Val His Leu Tyr His Leu Cys Gln Met Phe Pro Glu Ser 520 Ala Ser Asp Ala Ile Lys Phe Val Leu Arg Asp Ala Met His Glu Met 535 Glu Glu Met Ile Glu Thr Lys Gly Arg Ala Ala Leu Pro Gly Leu Asp 550 555 Val Leu Ile Tyr Leu Lys Ile Thr Gly Leu Leu Phe Pro Thr Ser Asp 570 Phe Trp His Pro Val Val Thr Pro Ala Leu Val Cys Leu Ser Gln Leu 585 Leu Thr Lys Cys Pro Ile Leu Ser Leu Gln Asp Val Val Lys Gly Leu 595 600 Phe Val Cys Cys Leu Phe Leu Glu Tyr Val Ala Leu Ser Gln Arg Phe Ile Pro Glu Leu Ile Asn Phe Leu Leu Gly Ile Leu Tyr Ile Ala Thr 635 Pro Asn Lys Ala Ser Gln Gly Ser Thr Leu Val His Pro Phe Arg Ala 645 650 Leu Gly Lys Asn Ser Glu Leu Leu Val Val Ser Ala Arg Glu Asp Val 665 Ala Thr Trp Gln Gln Ser Ser Leu Ser Leu Arg Trp Ala Ser Arg Leu 680 Arg Ala Pro Thr Ser Thr Glu Ala Asn His Ile Arg Leu Ser Cys Leu 695 Ala Val Gly Leu Ala Leu Leu Lys Arg Cys Val Leu Met Tyr Gly Ser

710 715 Leu Pro Ser Phe His Ala Ile Met Gly Pro Leu Arg Ala Leu Leu Thr 725 730 Asp His Leu Ala Asp Cys Ser His Pro Gln Glu Leu Gln Glu Leu Cys 745 Gln Ser Thr Leu Thr Glu Met Glu Ser Gln Lys Gln Leu Cys Arg Pro 760 Leu Thr Cys Glu Lys Ser Lys Pro Val Pro Leu Lys Leu Phe Thr Pro 775 780 Arg Leu Val Lys Val Leu Glu Phe Gly Arg Lys Gln Gly Ser Ser Lys 795 Glu Glu Gln Glu Arg Lys Arg Leu Ile His Lys His Lys Arg Glu Phe 805 810 Lys Gly Ala Val Arg Glu Ile Arg Lys Asp Asn Gln Phe Leu Ala Arg 825 Met Gln Leu Ser Glu Ile Met Glu Arg Asp Ala Glu Arg Lys Arg Lys 840 Val Lys Gln Leu Phe Asn Ser Leu Ala Thr Gln Glu Gly Glu Trp Lys 855 Ala Leu Lys Arg Lys Lys Phe Lys Lys 870 873

<210> 1215 <211> 319 <212>Amino acid <213> Homo sapiens

<400> 1215 Leu Thr Lys Gln Glu Asp Cys Cys Gly Ser Ile Gly Thr Ala Trp Gly 10 Gln Ser Lys Cys His Lys Cys Pro Gln Leu Gln Tyr Thr Gly Val Gln 20 Lys Pro Gly Pro Val Arg Gly Glu Val Gly Ala Asp Cys Pro Gln Gly Tyr Lys Arg Leu Asn Ser Thr His Cys Gln Asp Ile Asn Glu Cys Ala 55 Met Pro Gly Val Cys Arg His Gly Asp Cys Leu Asn Asn Pro Gly Ser Tyr Arg Cys Val Cys Pro Pro Gly His Ser Leu Gly Pro Ser Arg Thr 85 90 Gln Cys Ile Ala Asp Lys Pro Glu Glu Lys Ser Leu Cys Phe Arg Leu 105 Val Ser Pro Glu His Gln Cys Gln His Pro Leu Thr Thr Arg Leu Thr 120 125 Arg Gln Leu Cys Cys Cys Ser Val Gly Lys Ala Trp Gly Ala Arg Cys 135 140 Gln Arg Cys Pro Thr Asp Gly Thr Ala Ala Phe Lys Glu Ile Cys Pro 150 155 Ala Gly Lys Gly Tyr His Ile Leu Thr Ser His Gln Thr Leu Thr Ile 165 170 Gln Gly Glu Ser Asp Phe Ser Leu Phe Leu His Pro Asp Gly Pro Pro 185 Lys Pro Gln Gln Leu Pro Glu Ser Pro Ser Gln Ala Pro Pro Pro Glu 200 205 Asp Thr Glu Glu Gru Arg Gly Val Thr Thr Asp Ser Pro Val Ser Glu 215 220 Glu Arg Ser Val Gln Gln Ser His Pro Thr Ala Thr Thr Pro Ala 230 235 Arg Pro Tyr Pro Glu Leu Ile Ser Arg Pro Ser Pro Pro Thr Met Arg

<210> 1216 <211> 815 <212>Amino acid <213> Homo sapiens

<400> 1216 Met Ala Gly Gly His Cys Gly Ser Phe Pro Ala Ala Ala Ala Gly Ser Gly Glu Ile Val Gln Leu Asn Val Gly Gly Thr Arg Phe Ser Thr Ser Arg Gln Thr Leu Met Trp Ile Pro Asp Ser Phe Phe Ser Ser Leu Leu 40 Ser Gly Arg Ile Ser Thr Leu Arg Asp Glu Thr Gly Ala Ile Phe Ile 55 60 Asp Arg Asp Pro Ala Ala Phe Ala Pro Ile Leu Asn Phe Leu Arg Thr 70 75 Lys Glu Leu Asp Leu Arg Gly Val Ser Ile Asn Val Leu Arg His Glu 85 90 Ala Glu Phe Tyr Gly Ile Thr Pro Leu Val Arg Arg Leu Leu Cys 100 105 Glu Glu Leu Glu Arg Ser Ser Cys Gly Ser Val Leu Phe His Gly Tyr 120 Leu Pro Pro Pro Gly Ile Pro Ser Arg Lys Ile Asn Asn Thr Val Arg 135 Ser Ala Asp Ser Arg Asn Gly Leu Asn Ser Thr Glu Gly Glu Ala Arg 150 155 Gly Asn Gly Thr Gln Pro Val Leu Ser Gly Thr Gly Glu Glu Thr Val 165 170 Arg Leu Gly Phe Pro Val Asp Pro Arg Lys Val Leu Ile Val Ala Gly 185 His His Asn Trp Ile Val Ala Ala Tyr Ala His Phe Ala Val Trp Tyr 200 205 Arg Ile Lys Glu Ser Ser Gly Trp Gln Gln Val Phe Thr Ser Pro Tyr 215 220 Leu Asp Trp Thr Ile Glu Arg Val Ala Leu Asn Ala Lys Val Val Gly 230 235 Gly Pro His Gly Asp Lys Asp Lys Met Val Ala Val Ala Ser Glu Ser 245 250 Ser Ile Ile Leu Trp Ser Val Gln Asp Gly Gly Ser Gly Ser Glu Ile 265 270 Gly Val Phe Ser Leu Gly Val Pro Val Asp Ala Leu Phe Phe Ile Gly 280 Asn Gln Leu Val Ala Thr Ser His Thr Gly Lys Val Gly Val Trp Asn 295 300 Ala Val Thr Gln His Trp Gln Val Gln Asp Val Val Pro Ile Thr Ser 310 315 Tyr Asp Thr Ala Gly Ser Phe Leu Leu Leu Gly Cys Asn Asn Gly Ser 330 Ile Tyr Tyr Ile Asp Met Gln Lys Phe Pro Leu Arg Met Lys Asp Asn

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340
                            345
Asp Leu Leu Val Thr Glu Leu Tyr His Asp Pro Ser Asn Asp Ala Ile
                  360
                                  365
Thr Ala Leu Ser Val Tyr Leu Thr Pro Lys Thr Ser Val Ser Gly Asn
                     375
                             . 380
Trp Ile Glu Ile Ala Tyr Gly Thr Ser Ser Gly Ala Val Arg Val Ile
                  390
                                    395
Val Gln His Pro Glu Thr Val Gly Ser Gly Pro Gln Leu Phe Gln Thr
                                 410
Phe Thr Val His Arg Ser Pro Val Thr Lys Ile Met Leu Ser Glu Lys
                             425
His Leu Val Ser Val Cys Ala Asp Asn Asn His Val Arg Thr Trp Thr
                         440
Val Thr Arg Phe Arg Gly Met Ile Ser Thr Gln Pro Gly Ser Thr Pro
                     455
                                        460
Leu Ala Ser Phe Lys Ile Leu Ser Leu Glu Glu Thr Glu Ser His Gly
                 470
                                    475
Ser Tyr Ser Ser Gly Asn Asp Ile Gly Pro Phe Gly Glu Arg Asp Asp
              485
                                 490
Gln Gln Val Phe Ile Gln Lys Val Val Pro Ile Thr Asn Lys Leu Phe
                             505
Val Arg Leu Ser Ser Thr Gly Lys Arg Ile Cys Glu Ile Gln Ala Val
                         520
Asp Cys Thr Thr Ile Ser Ser Phe Thr Gly Arg Glu Cys Glu Gly Ser
            535
                                       540
Ser Arg Met Gly Ser Arg Pro Arg Arg Tyr Leu Phe Thr Gly His Thr
                 550
                                   555
Asn Gly Ser Ile Gln Met Trp Asp Leu Thr Thr Ala Met Asp Met Val
                               570
Asn Lys Ser Glu Asp Lys Asp Val Gly Gly Pro Thr Glu Glu Glu Leu
                            585
Leu Lys Leu Leu Asp Gln Cys Asp Leu Ser Thr Ser Arg Cys Ala Thr
                        600
Pro Asn Ile Ser Pro Ala Thr Ser Val Val Gln His Ser His Leu Arg
                    615
                                       620
Glu Ser Asn Ser Ser Leu Gln Leu Gln His His Asp Thr Thr His Glu
                630
                                    635
Ala Ala Thr Tyr Gly Ser Met Arg Pro Tyr Arg Glu Ser Pro Leu Leu
            645 650
Ala Arg Ala Arg Thr Glu Ser Phe His Ser Tyr Arg Asp Phe Gln
         660
                            665
Thr Ile Asn Leu Asn Arg Asn Val Glu Arg Ala Val Pro Glu Asn Gly
                        680
Asn Leu Gly Pro Ile Gln Ala Glu Val Lys Gly Ala Thr Gly Glu Cys
          695
Asn Ile Ser Glu Arg Lys Ser Pro Gly Val Glu Ile Lys Ser Leu Arg
                 710
Glu Leu Asp Ser Gly Leu Glu Val His Lys Ile Ala Glu Gly Phe Ser
              725
                               730
Glu Ser Lys Lys Arg Ser Ser Glu Asp Glu Asn Glu Asn Lys Ile Glu
          740
                            745
Phe Arg Lys Lys Gly Gly Phe Glu Gly Gly Gly Phe Leu Gly Arg Lys
              760
      755
Lys Val Pro Tyr Leu Ala Ser Ser Pro Ser Thr Ser Asp Gly Gly Thr
           775
Asp Ser Pro Gly Thr Ala Ser Pro Ser Pro Thr Lys Thr Thr Pro Ser
       790
                                   795
Pro Arg His Lys Lys Ser Asp Ser Ser Gly Gln Glu Tyr Ser Leu
             805
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<210> 1217 <211> 459 <212>Amino acid

<213> Homo sapiens

<400> 1217 Arg Arg Pro Thr Arg Pro Ile Leu Thr Asp Glu Leu Phe Lys Arg Thr 10 Ile Gln Leu Pro His Leu Lys Thr Leu Ile Leu Asn Gly Asn Lys Leu 25 Glu Thr Leu Ser Leu Val Ser Cys Phe Ala Asn Asn Thr Pro Leu Glu 40 His Leu Asp Leu Ser Gln Asn Leu Leu Gln His Lys Asn Asp Glu Asn 55 Cys Ser Trp Pro Glu Thr Val Val Asn Met Asn Leu Ser Tyr Asn Lys 70 75 Leu Ser Asp Ser Val Phe Arg Cys Leu Pro Lys Ser Ile Gln Ile Leu 85 90 Asp Leu Asn Asn Asn Gln Ile Gln Thr Val Pro Lys Glu Thr Ile His 100 105 Leu Met Ala Leu Arg Glu Leu Asn Ile Ala Phe Asn Phe Leu Thr Asp 120 Leu Pro Gly Cys Ser His Phe Ser Arg Leu Ser Val Leu Asn Ile Glu 135 140 Met Asn Phe Ile Leu Ser Pro Ser Leu Asp Phe Val Gln Ser Cys Gln 150 155 Glu Val Lys Thr Leu Asn Ala Gly Arg Asn Pro Phe Arg Cys Thr Cys 165 170 Glu Leu Lys Asn Phe Ile Gln Leu Glu Thr Tyr Ser Glu Val Met Met 180 185 Val Gly Trp Ser Asp Ser Tyr Thr Cys Glu Tyr Pro Leu Asn Leu Arg 200 Gly Thr Arg Leu Lys Asp Val His Leu His Glu Leu Ser Cys Asn Thr 215 220 Ala Leu Leu Ile Val Thr Ile Val Val Ile Met Leu Val Leu Gly Leu 230 235 Ala Val Ala Phe Cys Cys Leu His Phe Asp Leu Pro Trp Tyr Leu Arg 245 250 Met Leu Gly Gln Cys Thr Gln Thr Trp His Arg Val Arg Lys Thr Thr 265 Gln Glu Gln Leu Lys Arg Asn Val Arg Phe His Ala Phe Ile Ser Tyr 280 285 Ser Glu His Asp Ser Leu Trp Val Lys Asn Glu Leu Ile Pro Asn Leu 295 300 Glu Lys Glu Asp Gly Ser Ile Leu Ile Cys Leu Tyr Glu Ser Tyr Phe 310 315 Asp Pro Gly Lys Ser Ile Ser Glu Asn Ile Val Ser Phe Ile Glu Lys 325 330 Ser Tyr Lys Ser Ile Phe Val Leu Ser Pro Asn Phe Val Gln Asn Glu 345 Trp Cys His Tyr Glu Phe Tyr Phe Ala His His Asn Leu Phe His Glu 360 Asn Ser Asp His Ile Ile Leu Ile Leu Leu Glu Pro Ile Pro Phe Tyr 375 380 Cys Ile Pro Thr Arg Tyr His Lys Leu Lys Ala Leu Leu Glu Lys Lys 390 395 Ala Tyr Leu Glu Trp Pro Lys Asp Arg Arg Lys Cys Gly Leu Phe Trp 405 410 Ala Asn Leu Arg Ala Ala Ile Asn Val Asn Val Leu Ala Thr Arg Glu 420 425 Met Tyr Glu Leu Gln Thr Phe Thr Glu Leu Asn Glu Glu Ser Arg Gly 440 Ser Thr Ile Ser Leu Met Arg Thr Asp Cys Leu

450 455 459

<210> 1218 <211> 366 <212>Amino acid <213> Homo sapiens

<400> 1218 Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Leu Leu Thr Pro 10 Ser Trp Thr Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu 25 Phe Trp Ser Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp 40 Cys Glu Ala Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser 55 Lys Thr Lys Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser 75 His Lys Asn Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys 90 Thr His Leu Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn 100 105 Leu Ser Ile Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala 115 120 125 Gln Val Thr Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile 135 140 Val Asp Pro Val Thr Ser Pro Val Leu Asn Ile Met Val Ile Gln Thr 150 Glu Thr Asp Arg His Ile Thr Leu His Cys Leu Ser Val Asn Gly Ser 165 170 Leu Pro Ile Asn Tyr Thr Phe Phe Glu Asn His Val Ala Ile Ser Pro 185 Ala Ile Ser Lys Tyr Asp Arg Glu Pro Ala Glu Phe Asn Leu Thr Lys 200 Lys Asn Pro Gly Glu Glu Glu Tyr Arg Cys Glu Ala Lys Asn Arg 215 220 Leu Pro Asn Tyr Ala Thr Tyr Ser His Pro Val Thr Met Pro Ser Thr 230 235 Gly Gly Asp Ser Cys Pro Phe Cys Leu Lys Leu Leu Leu Pro Gly Leu 245 250 Leu Leu Leu Val Val Ile Ile Leu Ile Leu Ala Phe Trp Val Leu 265 Pro Lys Tyr Lys Thr Arg Lys Ala Met Arg Asn Asn Val Pro Arg Asp 280 Arg Gly Asp Thr Ala Met Glu Val Gly Ile Tyr Ala Asn Ile Leu Glu 295 Lys Gln Ala Lys Glu Glu Ser Val Pro Glu Val Gly Ser Arg Pro Cys 310 315 Val Ser Thr Ala Gln Asp Glu Ala Lys His Ser Gln Glu Leu Gln Tyr 325 330 Ala Thr Pro Val Phe Gln Glu Val Ala Pro Arg Glu Gln Glu Ala Cys 345 Asp Ser Tyr Lys Ser Gly Tyr Val Tyr Ser Glu Leu Asn Phe 360

<210> 1219 <211> 97 <212>Amino acid

<213> Homo sapiens

 A400> 1219

 Phe Phe Phe Phe Phe Phe Glu Glu Arg Arg Thr Gly Ser His Ser Val Gly His 1

 1
 5
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 Pro Arg Met Glu Tyr Ser Gly Val Ser Met Ala His Cys Ser Leu Asn 20
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<210> 1220 <211> 242 <212>Amino acid <213> Homo sapiens

<400> 1220

Asn Arg Glu Gly Ala Arg Lys Ile Gln Asn Lys Trp Leu Arg Pro Ser 10 Pro Arg Ser His Arg Thr Pro Glu Ser Val Ser Pro Glu Arg Tyr Ser 25 Tyr Gly Thr Ser Ser Ser Lys Arg Thr Glu Gly Ser Cys Arg Arg 40 Arg Arg Gln Ser Ser Ser Ser Ala Asn Ser Gln Gln Gly Gln Trp Glu 55 Thr Gly Ser Pro Pro Thr Lys Arg Gln Arg Arg Ser Arg Gly Arg Pro Ser Gly Gly Ala Lys Arg Arg Arg Gly Ala Pro Ala Ala Pro Gln Gln Gln Ser Glu Pro Ala Arg Pro Ser Ser Glu Gly Lys Val Thr Cys 105 Asp Ile Arg Leu Arg Val Arg Ala Glu Tyr Cys Glu His Gly Pro Ala 120 Leu Glu Gln Gly Val Ala Ser Arg Arg Pro Gln Ala Leu Ala Arg Gln 135 140 Leu Asp Val Phe Gly Gln Ala Thr Ala Val Leu Arg Ser Arg Asp Leu 150 155 Gly Ser Val Val Cys Asp Ile Lys Phe Ser Glu Leu Ser Tyr Leu Asp 165 170 Ala Phe Trp Gly Asp Tyr Leu Ser Gly Ala Leu Leu Gln Ala Leu Arg 185 Gly Val Phe Leu Thr Glu Ala Leu Arg Glu Ala Val Gly Arg Glu Ala 200 205 Val Arg Leu Leu Val Ser Val Asp Glu Ala Asp Tyr Glu Ala Gly Arg 215 220 Arg Arg Leu Leu Met Glu Glu Glu Gly Gly Arg Arg Pro Thr Glu 230 235 Ala Ser

242

<210> 1221 <211> 440 <212>Amino acid <213> Homo sapiens

<400> 1221 Ala Pro Asn Thr Ala Glu Leu Arg Ile Cys Arg Val Asn Lys Asn Cys 10 Gly Ser Val Arg Gly Gly Asp Glu Ile Phe Leu Leu Cys Asp Lys Val 25 Gln Lys Asp Asp Ile Glu Val Arg Phe Val Leu Asn Asp Trp Glu Ala 40 Lys Gly Ile Phe Ser Gln Ala Asp Val His Arg Gln Val Ala Ile Val 55 Phe Lys Thr Pro Pro Tyr Cys Lys Ala Ile Thr Glu Pro Val Thr Val 70 75 Lys Met Gln Leu Arg Arg Pro Ser Asp Gln Glu Val Ser Glu Ser Met 90 Asp Phe Arg Tyr Leu Pro Asp Glu Lys Asp Thr Tyr Gly Asn Lys Ala 105 Lys Lys Gln Lys Thr Thr Leu Leu Phe Gln Lys Leu Cys Gln Asp His 120 Val Glu Thr Gly Phe Arg His Val Asp Gln Asp Gly Leu Glu Leu 135 140 Thr Ser Gly Asp Pro Pro Thr Leu Ala Ser Gln Ser Ala Gly Ile Thr 150 155 Val Asn Phe Pro Glu Arg Pro Arg Pro Gly Leu Leu Gly Ser Ile Gly 170 165 Glu Gly Arg Tyr Phe Lys Lys Glu Pro Asn Leu Phe Ser His Asp Ala 185 Val Val Arg Glu Met Pro Thr Gly Val Ser Ser Gln Ala Glu Ser Tyr 200 Tyr Pro Ser Pro Gly Pro Ile Ser Ser Gly Leu Ser His His Ala Ser 215 220 Met Ala Pro Leu Pro Ser Ser Ser Trp Ser Ser Val Ala His Pro Thr 230 235 Pro Arg Ser Gly Asn Thr Asn Pro Leu Ser Ser Phe Ser Thr Arg Thr 250 Leu Pro Ser Asn Ser Gln Gly Ile Pro Pro Phe Leu Arg Ile Pro Val 265 Gly Asn Asp Leu Asn Ala Ser Asn Ala Cys Ile Tyr Asn Asn Ala Asp 280 Asp Ile Val Gly Met Glu Ala Ser Ser Met Pro Ser Ala Asp Leu Tyr 295 Gly Ile Ser Asp Pro Asn Met Leu Ser Asn Cys Ser Val Asn Met Met 310 315 Thr Thr Ser Ser Asp Ser Met Gly Glu Thr Asp Asn Pro Arg Leu Leu 325 330 Ser Met Asn Leu Glu Asn Pro Ser Cys Asn Ser Val Leu Asp Pro Arg 345 Asp Leu Arg Gln Leu His Gln Met Ser Ser Ser Met Ser Ala Gly 360 Ala Asn Ser Asn Thr Thr Val Phe Val Ser Gln Ser Asp Ala Phe Glu 375 380 Gly Ser Asp Phe Ser Cys Ala Asp Asn Ser Met Ile Asn Glu Ser Gly 390 395 Pro Ser Asn Ser Thr Asn Pro Asn Ser His Gly Phe Val Gln Asp Ser

405 410 415

Gln Tyr Ser Gly Ile Gly Ser Met Gln Asn Glu Gln Leu Ser Asp Ser
420 425 430

Phe Pro Tyr Glu Phe Phe Gln Val
435 440

<210> 1222 <211> 437 <212>Amino acid <213> Homo sapiens

<400> 1222

Arg Arg Leu Ser Leu Leu Asp Leu Gln Leu Gly Pro Leu Gly Arg Asp 10 Pro Pro Gln Glu Cys Ser Thr Phe Ser Pro Thr Asp Ser Gly Glu Glu 25 Pro Gly Gln Leu Ser Pro Gly Val Gln Phe Gln Arg Arg Gln Asn Gln 40 Arg Arg Phe Ser Met Glu Asp Val Ser Lys Arg Leu Ser Leu Pro Met 55 Asp Ile Arg Leu Pro Gln Glu Phe Leu Gln Lys Leu Gln Met Glu Ser 70 75 Pro Asp Leu Pro Lys Pro Leu Ser Arg Met Ser Arg Arg Ala Ser Leu 85 90 Ser Asp Ile Gly Phe Gly Lys Leu Glu Thr Tyr Val Lys Leu Asp Lys 100 105 Leu Gly Glu Gly Thr Tyr Ala Thr Val Phe Lys Gly Arg Ser Lys Leu 120 125 Thr Glu Asn Leu Val Ala Leu Lys Glu Ile Arg Leu Glu His Glu Glu 135 Gly Ala Pro Cys Thr Ala Ile Arg Glu Val Ser Leu Leu Lys Asn Leu 150 155 Lys His Ala Asn Ile Val Thr Leu His Asp Leu Ile His Thr Asp Arg 165 170 Ser Leu Thr Leu Val Phe Glu Tyr Leu Asp Ser Asp Leu Lys Gln Tyr 185 Leu Asp His Cys Gly Asn Leu Met Ser Met His Asn Val Lys Ile Phe 200 Met Phe Gln Leu Leu Arg Gly Leu Ala Tyr Cys His His Arg Lys Ile 215 220 Leu His Arg Asp Leu Lys Pro Gln Asn Leu Leu Ile Asn Glu Arg Gly 230 235 Glu Leu Lys Leu Ala Asp Phe Gly Leu Ala Arg Ala Lys Ser Val Pro 245 250 Thr Lys Thr Tyr Ser Asn Glu Val Val Thr Leu Trp Tyr Arg Pro Pro 265 Asp Val Leu Leu Gly Ser Thr Glu Tyr Ser Thr Pro Ile Asp Met Trp 280 Gly Val Gly Cys Ile His Tyr Glu Met Ala Thr Gly Arg Pro Leu Phe , 295 300 Pro Gly Ser Thr Val Lys Glu Glu Leu His Lys Ile Asn Arg Leu Leu 310 315 Gly Thr Pro Thr Glu Glu Thr Trp Pro Gly Val Thr Ala Phe Ser Glu 325 330 Phe Arg Thr Tyr Ser Phe Pro Cys Tyr Leu Pro Gln Pro Leu Ile Asn 340 345 His Ala Pro Arg Leu Asp Thr Asp Gly Ile His Leu Leu Ser Ser Leu 360 Leu Leu Tyr Glu Ser Lys Ser Arg Met Ser Ala Glu Ala Ala Leu Ser

<210> 1223 <211> 150 <212>Amino acid <213> Homo sapiens

<400> 1223 Cys Thr Pro His Gly Ser Ser Ser Trp Lys Ile Pro Leu Trp Pro 10 Arg His Met Ser Pro Leu His Ser Cys Leu Pro Val Gly Thr Ser Thr 25 Ser Ser Gly Pro Leu Ala Val Pro Arg Asp Cys Phe His Leu Cys Cys 40 Leu Trp Gly Gln Leu Leu Leu Ile Ser Cys Pro Leu Ala Cys Gly Gln Gly Cys Arg Val Ala Gly Gly Gln Gln His Val Pro Gly Gln Ala Leu 70 75 Gly Thr Leu Ser Pro Leu Val Ser Leu Leu Thr Trp Ala Gly Pro Ser 85 90 Leu Asp Trp Pro His Pro Gly Ser Leu Val Thr Pro Arg Cys Pro Ile 100 105 Leu Pro Ala Val Pro Val Leu Val Lys Gly Leu Gly Gly Trp Pro Pro 120 125 Thr Arg Pro Ser Arg Ala Ala Pro Val Ser Gly Pro Trp Asp Gln Leu 135 Pro Tyr Phe Pro Gly Leu

<210> 1224 <211> 276 <212>Amino acid <213> Homo sapiens

<400> 1224 Leu Ile Ser Pro Val Trp Gly Asn Ile Gln Arg Ser Arg Ser Val Pro . 10′ Leu Phe Pro Ser Gly Leu Val Leu Gly Gly Ile Trp Ala Arg Gly Pro 20 25 Leu Leu Ala Leu Leu Ala Ser Phe Asn Ile Ile Ser Val Leu Asn Ala . 40 Glu Cys Tyr Leu Lys Gln Ile Leu His Pro Thr Ser His Phe Thr Val 50 55 60 Ser Glu Thr Pro Pro Leu Ser Gly Asn Asp Thr Asp Ser Leu Ser Cys 70 75 Asp Ser Gly Ser Ser Ala Thr Ser Thr Pro Cys Val Ser Arg Leu Val

85 90 Thr Gly His His Leu Trp Ala Ser Lys Asn Gly Arg His Val Leu Gly 105 Leu Ile Glu Asp Tyr Glu Ala Leu Leu Lys Gln Ile Ser Gln Gly Gln · 115 120 Arg Leu Leu Ala Glu Met Asp Ile Gln Thr Gln Glu Ala Pro Ser Ser 135 Thr Ser Gln Glu Leu Gly Thr Lys Gly Pro His Pro Ala Pro Leu Ser 150 155 Lys Phe Val Ser Ser Val Ser Thr Ala Lys Leu Thr Leu Glu Glu Ala 165 170 Tyr Arg Arg Leu Lys Leu Leu Trp Arg Val Ser Leu Pro Glu Asp Gly 185 Gln Cys Pro Leu His Cys Glu Gln Ile Gly Glu Met Lys Ala Glu Val 195 200 Thr Lys Leu His Lys Lys Leu Phe Glu Gln Glu Lys Lys Leu Gln Asn 215 220 Thr Met Lys Leu Leu Gln Leu Ser Lys Arg Gln Glu Lys Val Ile Phe 230 235 Asp Gln Leu Val Val Thr His Lys Ile Leu Arg Lys Ala Arg Gly Asn 245 250 Leu Glu Leu Arg Pro Gly Gly Ala His Pro Gly Thr Cys Ser Pro Ser 260 265 Arg Pro Gly Ser 275 276

<210> 1225 <211> 270 <212>Amino acid <213> Homo sapiens

<400> 1225 Leu Gly Leu Phe Cys Ile Leu Pro Ile Asp Thr Leu Cys Ala Val Leu 10 Glu Arg Asp Thr Leu Ser Ile Arg Glu Ser Arg Leu Phe Gly Ala Val 25 Val Arg Trp Ala Glu Ala Glu Cys Gln Arg Gln Gln Leu Pro Val Thr 40 Phe Gly Asn Lys Gln Lys Val Leu Gly Lys Ala Leu Ser Leu Ile Arg 55 Phe Pro Leu Met Thr Ile Glu Glu Phe Ala Ala Gly Pro Ala Gln Ser 70 Gly Ile Leu Ser Asp Arg Glu Val Val Asn Leu Phe Leu His Phe Thr 85 90 Val Asn Pro Lys Pro Arg Val Glu Tyr Ile Asp Arg Pro Arg Cys Cys 105 Leu Arg Gly Lys Glu Cys Cys Ile Asn Arg Phe Gln Gln Val Glu Ser 115 120 Arg Trp Gly Tyr Ser Gly Thr Ser Asp Arg Ile Arg Phe Thr Val Asn 135 140 Arg Arg Ile Ser Ile Val Gly Phe Gly Leu Tyr Gly Ser Ile His Gly 150 155 . 160 Pro Thr Asp Tyr Gln Val Asn Ile Gln Ile Ile Glu Tyr Glu Lys Lys 170 Gln Thr Leu Gly Gln Asn Asp Thr Gly Phe Ser Cys Asp Gly Thr Ala 185 Asn Thr Phe Arg Val Met Phe Lys Glu Pro Ile Glu Ile Leu Pro Asn 200 Val Cys Tyr Thr Ala Cys Ala Thr Leu Lys Gly Pro Asp Ser His Tyr

<210> 1226 <211> 273 <212>Amino acid <213> Homo sapiens

<400> 1226 Ser Val Trp Trp Asn Ser Glu Val Lys Asp Trp Met Gln Lys Lys Arg 10 Arg Gly Leu Arg Asn Ser Arg Ala Thr Ala Gly Asp Ile Ala His Tyr Tyr Arg Asp Tyr Val Val Lys Lys Gly Leu Gly His Asn Phe Val Ser 40 Gly Ala Val Val Thr Ala Val Glu Trp Gly Thr Pro Asp Pro Ser Ser 55 Cys Gly Ala Gln Asp Ser Ser Pro Leu Phe Gln Val Ser Gly Phe Leu 70 Thr Arg Asn Gln Ala Gln Gln Pro Phe Ser Leu Trp Ala Arg Asn Val 85 90 Val Leu Ala Thr Gly Thr Phe Asp Ser Pro Ala Arg Leu Gly Ile Pro 105 Gly Glu Ala Leu Pro Phe Ile His His Glu Leu Ser Ala Leu Glu Ala 120 125 Ala Thr Arg Val Gly Ala Val Thr Pro Ala Ser Asp Pro Val Leu Ile 135 140 Ile Gly Ala Gly Leu Ser Ala Ala Asp Ala Val Leu Tyr Ala Arg His 155 150 Tyr Asn Ile Pro Val Ile His Ala Phe Arg Arg Ala Val Asp Asp Pro 170 Gly Leu Val Phe Asn Gln Leu Pro Lys Met Leu Tyr Pro Glu Tyr His 185 Lys Val His Gln Met Met Arg Glu Gln Ser Ile Leu Ser Pro Ser Pro 200 Tyr Glu Gly Tyr Arg Ser Leu Pro Arg His Gln Leu Leu Cys Phe Lys 215 Glu Asp Cys Gln Ala Val Phe Gln Asp Leu Glu Gly Val Glu Lys Val 230 Phe Gly Val Ser Leu Val Leu Val Leu Ile Gly Ser His Pro Asp Leu 250 Ser Phe Leu Pro Gly Ala Gly Leu Thr Leu Gln Trp Ile Leu Thr Ser 265 Arg 273

<210> 1227 <211> 86 <212>Amino acid <213> Homo sapiens

<400> 1227

Lys Leu Arg Pro Phe Ile Phe Ser Asn Gln Ser Leu Trp Leu His Ser 10 Tyr Glu Gly Ala Glu Leu Glu Lys Thr Phe Ile Lys Gly Ser Trp Ala Thr Phe Trp Val Lys Val Ala Ser Cys Trp Ala Cys Val Leu Leu Tyr Leu Gly Leu Leu Ala Pro Leu Cys Trp Pro Pro Thr Gln Lys Pro 60 Gln Pro Leu Ile Leu Arg Arg Arg His Arg Ile Ile Ser Pro Asp 70 Asn Lys Tyr Pro Pro Val 85 86

<210> 1228 <211> 249 <212>Amino acid <213> Homo sapiens

<400> 1228

Gln Leu Ile His Leu Ser His Gly Tyr Gln Ile His Trp Thr Asp Tyr 10 Tyr Asn Val Gly Thr Gly Arg Pro Glu Phe Gly Thr Arg Ala Ala His Lys Ser Leu Ala Gly Ala Glu Leu Lys Thr Leu Lys Asp Phe Val Thr Val Leu Ala Lys Leu Phe Pro Gly Arg Pro Pro Val Lys Lys Leu Leu 55 Glu Met Leu Gln Glu Trp Leu Ala Ser Leu Pro Leu Asp Arg Ile Pro 70 Tyr Asn Ala Val Leu Asp Leu Val Asn Asn Lys Met Arg Ile Ser Gly 85 Ile Phe Leu Thr Asn His Ile Lys Trp Val Gly Cys Gln Gly Ser Arg 105 Ser Glu Leu Arg Gly Tyr Pro Cys Ser Leu Trp Lys Leu Phe His Thr 120 Leu Thr Val Glu Ala Ser Thr His Pro Asp Ala Leu Val Gly Thr Gly 135 140 Phe Glu Asp Asp Pro Gln Ala Val Leu Gln Thr Met Arg Arg Tyr Val 150 155 His Thr Phe Phe Gly Cys Lys Glu Cys Gly Glu His Phe Glu Glu Met 170 Ala Lys Glu Ser Met Asp Ser Val Lys Thr Pro Asp Gln Ala Ile Leu 185 Trp Leu Trp Lys Lys His Asn Met Val Asn Gly Arg Leu Ala Gly Glu 200 Lys Pro Leu Gly Met Gly Gly Ser Ala Arg Ala Glu Gly Gly Pro Gly 215 220 Pro Gly Thr Ala Arg Thr Ala Arg Leu Pro Trp Gly Leu Ser Leu Ser 230 235 Phe Ala Ala Ser Cys His Pro Leu Cys 245 ·

<210> 1229 <211> 800 <212>Amino acid

<213> Homo sapiens

<400> 1229 His Gly Gly Ala Thr Phe Ile Asn Ala Phe Val Thr Thr Pro Met Cys 10 Cys Pro Ser Arg Ser Ser Met Leu Thr Gly Lys Tyr Val His Asn His Asn Val Tyr Thr Asn Asn Glu Asn Cys Ser Ser Pro Ser Trp Gln Ala Met His Glu Pro Arg Thr Phe Ala Val Tyr Leu Asn Asn Thr Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr Leu Asn Glu Tyr Asn Gly Ser Tyr 70 Ile Pro Pro Gly Trp Arg Glu Trp Leu Gly Leu Ile Lys Asn Ser Arg 85 90 Phe Tyr Asn Tyr Thr Val Cys Arg Asn Gly Ile Lys Glu Lys His Gly 100 105 Phe Asp Tyr Ala Lys Asp Tyr Phe Thr Asp Leu Ile Thr Asn Glu Ser 120 125 Ile Asn Tyr Phe Lys Met Ser Lys Arg Met Tyr Pro His Arg Pro Val 135 140 Met Met Val Ile Ser His Ala Glu Pro His Gly Pro Glu Asp Ser Ala 150 155 Pro Gln Phe Ser Lys Leu Tyr Pro Asn Ala Ser Gln His Ile Thr Pro 165 170 Ser Tyr Asn Tyr Ala Pro Asn Met Asp Lys His Trp Ile Met Gln Tyr 185 Thr Gly Pro Met Leu Pro Ile His Met Glu Phe Thr Asn Ile Leu Gln 200 Arg Lys Arg Leu Gln Thr Leu Met Ser Val Asp Asp Ser Val Glu Arg 215 Leu Tyr Asn Met Leu Val Glu Thr Gly Glu Leu Glu Asn Thr Tyr Ile 230 235 Ile Tyr Thr Ala Asp His Gly Tyr His Ile Gly Gln Phe Gly Leu Val. 245 250 Lys Gly Lys Ser Met Pro Tyr Asp Phe Asp Ile Arg Val Pro Phe Phe 265 Ile Arg Gly Pro Ser Val Glu Pro Gly Ser Ile Val Pro Gln Ile Val 280 Leu Asn Ile Asp Leu Ala Pro Thr Ile Leu Asp Ile Ala Gly Leu Asp 295 Thr Pro Pro Asp Val Asp Gly Lys Ser Val Leu Lys Leu Leu Asp Pro 315 Glu Lys Pro Gly Asn Arg Phe Arg Thr Asn Lys Lys Ala Lys Ile Trp 330 Arg Asp Thr Phe Leu Val Glu Arg Gly Lys Phe Leu Arg Lys Lys Glu 345 Glu Ser Ser Lys Asn Ile Gln Gln Ser Asn His Leu Pro Lys Tyr Glu Arg Val Lys Glu Leu Cys Gln Gln Ala Arg Tyr Gln Thr Ala Cys Glu 380 Gln Pro Gly Gln Lys Trp Gln Cys Ile Glu Asp Thr Ser Gly Lys Leu 390 395 Arg Ile His Lys Cys Lys Gly Pro Ser Asp Leu Leu Thr Val Arg Gln 410 Ser Thr Arg Asn Leu Tyr Ala Arg Gly Phe His Asp Lys Asp Lys Glu 425 Cys Ser Cys Arg Glu Ser Gly Tyr Arg Ala Ser Arg Ser Gln Arg Lys 440 Ser Gln Arg Gln Phe Leu Arg Asn Gln Gly Thr Pro Lys Tyr Lys Pro

450 455 Arg Phe Val His Thr Arg Gln Thr Arg Ser Leu Ser Val Glu Phe Glu 470 475 Gly Glu Ile Tyr Asp Ile Asn Leu Glu Glu Glu Glu Glu Leu Gln Val 485 490 Leu Gln Pro Arg Asn Ile Ala Lys Arg His Asp Glu Gly His Lys Gly 505 Pro Arg Asp Leu Gln Ala Ser Ser Gly Gly Asn Arg Gly Arg Met Leu 520 525 Ala Asp Ser Ser Asn Ala Val Gly Pro Pro Thr Thr Val Arg Val Thr 535 540 His Lys Cys Phe Ile Leu Pro Asn Asp Ser Ile His Cys Glu Arg Glu 550 555 Leu Tyr Gln Ser Ala Arg Ala Trp Lys Asp His Lys Ala Tyr Ile Asp 570 Glu Glu Ile Glu Ala Leu Gln Asp Lys Ile Lys Asn Leu Arg Glu Val 585 Arg Gly His Leu Lys Arg Arg Lys Pro Glu Glu Cys Ser Cys Ser Lys 600 605 Gln Ser Tyr Tyr Asn Lys Glu Lys Gly Val Lys Lys Gln Glu Lys Leu 615 620 Lys Ser His Leu His Pro Phe Lys Glu Ala Ala Gln Glu Val Asp Ser 630 635 Lys Leu Gln Leu Phe Lys Glu Asn Asn Arg Arg Arg Lys Lys Glu Arg 645 650 Lys Glu Lys Arg Arg Gln Arg Lys Gly Glu Glu Cys Ser Leu Pro Gly 660 665 Leu Thr Cys Phe Thr His Asp Asn Asn His Trp Gln Thr Ala Pro Phe 680 Trp Asn Leu Gly Ser Phe Cys Ala Cys Thr Ser Ser Asn Asn Asn Thr 695 700 Tyr Trp Cys Leu Arg Thr Val Asn Glu Thr His Asn Phe Leu Phe Cys 710 715 Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Met Asn Thr Asp Pro 730 Tyr Gln Leu Thr Asn Thr Val His Thr Val Glu Arg Gly Ile Leu Asn 745 Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Gln Gly Tyr Lys 760 Gln Cys Asn Pro Arg Pro Lys Asn Leu Asp Val Gly Asn Lys Asp Gly 775 780 Gly Ser Tyr Asp Leu His Arg Gly Gln Leu Trp Asp Gly Trp Glu Gly 790

<210> 1230 <211> 698 <212>Amino acid <213> Homo sapiens

<400> 1230

	50	,													
Glr	-		I.01	, (2)	, Arc	55			. Dwa	. nl -	60 - 11-			Tire	Pro
65	5				70)				75	;				80
				85	5				90)			•	95	
Arg	Leu	Ser	Ala 100		1 Thr	Trp	Asp	Lev 105		a Arg	Leu	Pro	Leu 110		Arg
Glu	Gln	Asr 115		/ Asp	Ser	His	His 120		Gly	/ Asp	Trp	Arg 125	Gly		Ser
Arg	Asp	Ser		Pro	Leu	Pro	Val		Ser	Arg	Lys	Tyr		Glu	Gly
Pro	Asp		Glu	a Arg	Arg	Pro		r Glu	Gly		His		Pro	Leu	Asp
		Asp	Val	. Arg	Val		Val	Pro	Arg 170			Ile	Pro	Arg	160 Ala
Pro	Ser	Ser	Asp	Glu		Суз	Phe	Phe 185	Asp		Leu	Thr	Lys 190	Phe	Gln
Ser	Ser	Arg	Met		Asp	Gln	Arg	Cys		Leu	Asp	Asp 205	Gly		Ala
Gly	Ala 210	Ala		Ala	Thr	Ala 215	Ala		Thr	Leu	Glu 220			Ile	Ala
Gln 225	Pro		Met	Thr	Ala 230	Ser		Gln	Thr	Glu 235		Phe	Phe	Asp	Leu
		Ser	Ser	Gln 245	Ser		Arg	Leu	Asp 250	Asp	Gln	Arg	Ala	Ser 255	240 Val
Gly	Ser	Leu	Pro 260		Leu	Arg	Ile	Thr 265		Ser	Asn	Ala	Gly 270		Leu
Arg	Gly	His 275		Glu	Pro	Gln	Glu 280	Pro		Asp	Asp	Phe 285		Asn	Met
Leu	Ile 290	Lys	Tyr	Gln	Ser	Ser 295			Asp	Asp	Gln 300		Cys	Pro	Pro
Pro 305	Asp	Val	Leu	Pro	Arg 310	Gly	Pro	Thr	Met	Pro 315		Glu	Asp	Phe	Phe 320
Ser	Leu	Ile	Gln	Arg 325		Gln	Ala	Lys	Arg 330	Met	Asp	Glu	Gln	Arg 335	
Asp	Leu	Ala	Gly 340		Pro	Gly	Ala	Gly 345		Arg	Arg	Pro	Ala 350		Ala
Pro	Ala	Ala 355	Val	Pro	Ala	Trp	Cys 360	Glu	Leu	Arg	Pro	Cys 365	Ala	His	Arg
Gln	Ala 370	His	Pro	Ala	Pro	Thr 375	Pro	Gly	Arg	Arg	Ser 380	His	Ser	His	Ser
His 385	Val	Leu	Pro		Pro 390		Pro			Gly 395		Gly	His	Ala	Ala 400
Pro	Arg	Pro	Pro	Arg 405	Pro	Arg	Ala	Thr	Gly 410	Ser	Gly	Gln	Ala	Ala 415	
Gly	Gly	Arg	Ala 420	Cys	Phe	His	Pro	Gly 425	Leu	Ala	Pro	Met	Ala 430		Ser
Phe	.Leu	Pro 435	Ser	Ala	Pro	Ala	Ala 440		Arg	Thr	Gly	Pro 445		Ala	Cys
Arg	Pro 450	Arg	Pro	Gly	Ala	Val 455	Arg	Leu	Pro	His	Pro 460		Pro	Gln	Ala
Leu 465	Pro	Val	Leu	Pro	Cys 470	Pro	Ala	Lys	Cys	Glu 475	Thr	Leu	Leu	Ser	Pro 480
Ser	Pro	Ser	Pro	Lys 485		Ser	Leu	Ser	Arg 490	Leu	Leu	Gly	Pro	Pro 495	
Thr	Gly	Pro	Cys 500		Val	Pro	Pro	Glu 505		Val	Leu	Gly	Trp 510		Cys
Asp	Arg	His 515		Pro	Pro	Leu	Gln 520		Arg	Pro	Gly	Ala 525		Leu	Pro
Pro	Ser 530	Leu	Ser	Pro	His	Ser 535		Ala	Arg	Gly	Gln 540		Pro	Gln	Lys
Ala 545	Pro	Glņ	Thr	Thr	His 550	Gly	Arg	Pro	Gly	Cys 555		Gly	Ser	Pro	Glu 560
Val	Pro	Pro	Ala	Glu		Gln	Gly	Pro	Ala	Gly	Ala	Ser	Thr	Gly	

565 570 Gly Pro Ile Ser Lys Ala Glu Gly Met Ala Gly His Glu Leu Arg His 580 585 Ser Lys Thr Pro Ser Gln Glu Lys Gly Gln Gly Leu Val Leu Gly Met 595 600 Leu Thr Gly Ser Lys Ser Ser Ala Gln Ser Gly Trp Glu Val Ala Pro 610 615 Gly Ser Val Thr Leu Thr Gln Val Gly Gly Trp Ser Val Glu Ala Gly 630 635 Glu Ala Ser Leu Ser Ser Thr Leu Gln Thr Pro His Met Arg Thr Pro 645 . 650 Leu Leu Pro Pro Ala Gly Gly Asp Asp Ile Thr Ala Leu Ser Met Gly · 660 665 Arg Gly Leu Thr Gly His Gln Val Arg Asp Pro Arg Thr Gly Arg Thr 680 Cys Trp Ser Leu Arg Trp Ala Pro Gly Ala 695

<210> 1231 <211> 131 <212>Amino acid <213> Homo sapiens

<400> 1231 Asn Ser Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro 25 Ile Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val 55 Gly Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro 85 90 Gln His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp 105 Ser Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr Arg Leu Ala Lys 115 120 Asp Gly Leu 130 131

<210> 1232 · <211> 71 <212>Amino acid <213> Homo sapiens

35 40 45

Ser Glu Pro Ser Glu Glu Asp His Cys Ser Pro Ser Ala Arg Val Thr
50 55 60 .

Phe Phe Thr Asp Asn Ser Tyr
65 70 71

<210> 1233 <211> 146 <212>Amino acid <213> Homo sapiens

<400> 1233 Val Ile Val His Ala Arg Pro Ile Arg Thr Arg Ala Ser Lys Tyr Tyr 10 Ile Pro Glu Ala Val Tyr Gly Leu Pro Ala Tyr Pro Ala Tyr Ala Gly 25 Gly Gly Gly Phe Val Leu Ser Gly Ala Thr Leu His Arg Leu Ala Gly 40 Ala Cys Ala Gln Val Glu Leu Phe Pro Ile Asp Asp Val Phe Leu Gly 55 Met Cys Leu Gln Arg Leu Arg Leu Thr Pro Glu Pro His Pro Ala Phe 70 75 Arg Thr Phe Gly Ile Pro Gln Pro Ser Ala Ala Pro His Leu Ser Thr 85 90 Phe Asp Pro Cys Phe Tyr Arg Glu Leu Val Val Val His Gly Leu Ser 105 110 Ala Ala Asp Ile Trp Leu Met Trp Arg Leu Leu His Gly Pro His Gly 120 125 Pro Ala Cys Ala His Pro Gln Pro Val Ala Ala Gly Pro Phe Gln Trp 135 140 Asp Ser 145 146

<210> 1234 <211> 299 <212>Amino acid <213> Homo sapiens

 Ala Ser Ala Ala Cys
 Ser Met Asp Pro Ile Asp Ser Phe Glu Leu

 1
 5
 6
 10
 12
 15
 15

 Leu Asp Leu Leu Phe Asp Arg Gln Asp Gly Ile Leu Arg His Val Glu
 20
 25
 30
 30
 20

 Leu Gly Glu Gly Trp Gly His Val Lys Asp Gln Val Leu Pro Asn Pro 35
 40
 45
 45
 45

 Asp Ser Asp Asp Asp Phe Leu Ser Ser Ile Leu Gly Ser Gly Asp Ser Leu 50
 55
 60
 55
 60

 Pro Ser Ser Pro Leu Trp Ser Pro Glu Gly Ser Asp Ser Gly Ile Ser 65
 75
 80

 Glu Asp Leu Pro Ser Asp Pro Gln Asp Thr Pro Pro Arg Ser Gly Pro 95
 95

 Ala Thr Ser Pro Ala Gly Cys His Pro Ala Gln Pro Gly Lys Gly Pro 100
 100
 105
 110

 Cys Leu Ser Tyr His Pro Gly Asn Ser Cys Ser Thr Thr Thr Thr Pro Gly

120 125 Pro Val Ile Gln Gln His His Leu Gly Ala Ser Tyr Leu Leu Arg 135 Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys 150 155 Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu 165 170 Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg 185 Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Glu Tyr Ile 200 Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser 215 220 Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly 230 235 Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu 245 250 Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp 265 Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro 280 Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr 295

<210> 1235 <211> 1098 <212>Amino acid <213> Homo sapiens

<400> 1235 Ala Arg Gly Arg Arg Ser Arg Pro Val Trp Ala Ala Ser Trp Gly Gly 10 Arg Gly Arg Pro Ala Ala Arg Arg Pro Arg Gly Leu Ala Ala Thr Met Gly Phe Glu Leu Asp Arg Phe Asp Gly Asp Val Asp Pro Asp Leu Lys Cys Ala Leu Cys His Lys Val Leu Glu Asp Pro Leu Thr Thr Pro Cys Gly His Val Phe Cys Ala Gly Cys Val Leu Pro Trp Val Val Gln Glu Gly Ser Cys Pro Ala Arg Cys Arg Gly Arg Leu Ser Ala Lys Glu Leu Asn His Val Leu Pro Leu Lys Arg Leu Ile Leu Lys Leu Asp Ile 105 Lys Cys Ala Tyr Ala Thr Arg Gly Cys Gly Arg Val Val Lys Leu Gln 120 Gln Leu Pro Glu His Leu Glu Arg Cys Asp Phe Ala Pro Ala Arg Cys 135 Arg His Ala Gly Cys Gly Gln Val Leu Leu Arg Arg Asp Val Glu Ala 150 155 His Met Arg Asp Ala Cys Asp Ala Arg Pro Val Gly Arg Cys Gln Glu 170 Gly Cys Gly Leu Pro Leu Thr His Gly Glu Gln Arg Ala Gly Gly His 180 185 190 Cys Cys Ala Arg Ala Leu Arg Ala His Asn Gly Ala Leu Gln Ala Arg 200 Leu Gly Ala Leu His Lys Ala Leu Lys Lys Glu Ala Leu Arg Ala Gly 215 Lys Arg Glu Lys Ser Leu Val Ala Gln Leu Ala Ala Gln Leu Glu

230 235 Leu Gln Met Thr Ala Leu Arg Tyr Gln Lys Lys Phe Thr Glu Tyr Ser 245 250 Ala Arg Leu Asp Ser Leu Ser Arg Cys Val Ala Ala Pro Pro Gly Gly 265 Lys Gly Glu Glu Thr Lys Ser Leu Thr Leu Val Leu His Arg Asp Ser 280 285 Gly Ser Leu Gly Phe Asn Ile Ile Gly Gly Arg Pro Ser Val Asp Asn 295 300 His Asp Gly Ser Ser Ser Glu Gly Ile Phe Val Ser Lys Ile Val Asp 310 315 Ser Gly Pro Ala Ala Lys Glu Gly Gly Leu Gln Ile His Asp Arg Ile 325 330 Ile Glu Val Asn Gly Arg Asp Leu Ser Arg Ala Thr His Asp Gln Ala 340 345 Val Glu Ala Phe Lys Thr Ala Lys Glu Pro Ile Val Val Gln Val Leu 360 Arg Arg Thr Pro Arg Thr Lys Met Phe Thr Pro Pro Ser Glu Ser Gln 375 Leu Val Asp Thr Gly Thr Gln Thr Asp Ile Thr Phe Glu His Ile Met 390 395 Ala Leu Thr Lys Met Ser Ser Pro Ser Pro Pro Val Leu Asp Pro Tyr 405 410 Leu Leu Pro Glu Glu His Pro Ser Ala His Glu Tyr Tyr Asp Pro Asn 420 425 Asp Tyr Ile Gly Asp Ile His Gln Glu Met Asp Arg Glu Glu Leu Glu 440 445 Leu Glu Glu Val Asp Leu Tyr Arg Met Asn Ser Gln Asp Lys Leu Gly 455 460 Leu Thr Val Cys Tyr Arg Thr Asp Asp Glu Asp Asp Ile Gly Ile Tyr 470 475 Ile Ser Glu Ile Asp Pro Asn Ser Ile Ala Ala Lys Asp Gly Arg Ile 490 Arg Glu Gly Asp Arg Ile Ile Gln Ile Asn Gly Ile Glu Val Gln Asn 505 500 Arg Glu Glu Ala Val Ala Leu Leu Thr Ser Glu Glu Asn Lys Asn Phe 520 Ser Leu Leu Ile Ala Arg Ala Glu Leu Gln Leu Asp Glu Gly Trp Met 530 535 Asp Asp Asp Arg Asn Asp Phe Leu Asp Asp Leu His Met Asp Met Leu 550 555 560 Glu Glu Gln His His Gln Ala Met Gln Phe Thr Ala Ser Val Leu Gln 570 Gln Lys Lys His Asp Glu Asp Gly Gly Thr Thr Asp Thr Ala Thr Ile 585 Leu Ser Asn Gln His Glu Lys Asp Ser Gly Val Gly Arg Thr Asp Glu 600 605 Ser Thr Arg Asn Asp Glu Ser Ser Glu Gln Glu Asn Asn Gly Asp Asp 615 Ala Thr Ala Ser Ser Asn Pro Leu Ala Gly Gln Arg Lys Leu Thr Cys 635 Ser Gln Asp Thr Leu Gly Ser Gly Asp Leu Pro Phe Ser Asn Lys Ser 650 . Phe Ile Ser Pro Glu Cys Thr Gly Ala Ala Tyr Leu Gly Ile Pro Val 665 Asp Glu Cys Glu Arg Phe Arg Glu Leu Leu Glu Leu Lys Cys Gln Val 675 680 Lys Ser Ala Thr Pro Tyr Gly Leu Tyr Tyr Pro Ser Gly Pro Leu Asp 695 Ala Gly Lys Ser Asp Pro Glu Ser Val Asp Lys Glu Leu Glu Leu Leu 710 715 Asn Glu Glu Leu Arg Ser Ile Glu Leu Glu Cys Leu Ser Ile Val Arg 725 . 730 Ala His Lys Met Gln Gln Leu Lys Glu Gln Tyr Arg Glu Ser Trp Met

740 745 Leu His Asn Ser Gly Phe Arg Asn Tyr Asn Thr Ser Ile Asp Val Arg 760 Arg His Glu Leu Ser Asp Ile Thr Glu Leu Pro Glu Lys Ser Asp Lys 775 Asp Ser Ser Ser Ala Tyr Asn Thr Gly Glu Ser Cys Arg Ser Thr Pro 790 795 Leu Thr Leu Glu Ile Ser Pro Asp Asn Ser Leu Arg Arg Ala Ala Glu 805 810 Gly Ile Ser Cys Pro Ser Ser Glu Gly Ala Val Gly Thr Thr Glu Ala 825 Tyr Gly Pro Ala Ser Lys Asn Leu Leu Ser Ile Thr Glu Asp Pro Glu 835 840 Val Gly Thr Pro Thr Tyr Ser Pro Ser Leu Lys Glu Leu Asp Pro Asn 855 860 Gln Pro Leu Glu Ser Lys Glu Arg Arg Ala Ser Asp Gly Ser Arg Ser 870 875 Pro Thr Pro Ser Gln Lys Leu Gly Ser Ala Tyr Leu Pro Ser Tyr His 885 890 His Ser Pro Tyr Lys His Ala His Ile Pro Ala His Ala Gln His Tyr 900 905 Gln Ser Tyr Met Gln Leu Ile Gln Gln Lys Ser Ala Val Glu Tyr Ala 920 925 Gln Ser Gln Met Ser Leu Val Ser Met Cys Lys Asp Leu Ser Ser Pro 930 935 940 Thr Pro Ser Glu Pro Arg Met Glu Trp Lys Val Lys Ile Arg Ser Asp 950 955 Gly Thr Arg Tyr Ile Thr Lys Arg Pro Val Arg Asp Arg Leu Leu Arg 965 970 Glu Arg Ala Leu Lys Ile Arg Glu Glu Arg Ser Gly Met Thr Thr Asp 985 990 Asp Asp Ala Val Ser Glu Met Lys Met Gly Arg Tyr Trp Ser Lys Glu 995 1000 1005 Glu Arg Lys Gln His Leu Val Lys Ala Lys Glu Gln Arg Arg Arg Arg 1010 1015 1020 Glu Phe Met Met Gln Ser Arg Leu Asp Cys Leu Lys Glu Gln Gln Ala 1030 1035 Ala Asp Asp Arg Lys Glu Met Asn Ile Leu Glu Leu Ser His Lys Lys 1045 1050 1055 Met Met Lys Lys Arg Asn Lys Lys Ile Phe Asp Asn Trp Met Thr Ile 1060 1065 1070 Gln Glu Leu Leu Thr His Gly Thr Lys Ser Pro Asp Gly Thr Arg Val 1080 1085 Tyr Asn Ser Phe Leu Ser Val Thr Thr Val 1090 1095

<210> 1236 <211> 51 <212>Amino acid <213> Homo sapiens

50 51

<210> 1237 <211> 70 <212>Amino acid <213> Homo sapiens

<210> 1238 <211> 114 <212>Amino acid <213> Homo sapiens

<400> 1238 Phe Trp Ala Pro Gly Pro Pro Gly Val Gly Ala Ala Val Gly Asp Ala 5 10 Ser Thr Arg Ser Leu Arg Glu Ser Cys Pro Ser Pro Ser Pro Gly Arg 25 Leu Arg Arg Thr Thr Ala Pro Trp Ser Ser Gln Ala Arg Ala Ala Pro Ala Pro Ser Ser Ser Cys Arg Gly Pro Asp Gly Ala Ser Ser Pro Arg Asp Leu Pro Trp Arg Pro Trp Lys Ile Leu Arg Arg Thr Pro Leu 70 Ser Gly Asp Val Glu Leu Ser Gln Val His Pro Asp Gln Arg Ile Leu 85 90 Arg Arg Phe Ile Leu Ser Arg Thr Cys Gly Asn Thr Ile Pro Gly Met 105 Ala Glu 114

<210> 1239 <211> 174 <212>Amino acid <213> Homo sapiens

<400> 1239
Met Arg Arg Phe Leu Ser Lys Val Tyr Ser Phe Pro Met Arg Lys Leu

10 Ile Leu Phe Leu Val Phe Pro Val Val Arg Gln Thr Pro Thr Gln His 25 Phe Lys Asn Gln Phe Pro Ala Leu His Trp Glu His Glu Leu Gly Leu Ala Phe Thr Lys Asn Arg Met Asn Tyr Thr Asn Lys Phe Leu Leu Ile Pro Glu Ser Gly Asp Tyr Phe Ile Tyr Ser Gln Val Thr Phe Arg Gly 70 75 Met Thr Ser Glu Cys Ser Glu Ile Arg Gln Ala Gly Arg Pro Asn Lys Pro Asp Ser Ile Thr Val Val Ile Thr Lys Val Thr Asp Ser Tyr Pro 105 Glu Pro Thr Gln Leu Leu Met Gly Thr Lys Ser Val Cys Glu Val Gly 120 125 Ser Asn Trp Phe Gln Pro Ile Tyr Leu Gly Ala Met Phe Ser Leu Gln 135 Glu Gly Asp Lys Leu Met Val Asn Val Ser Asp Ile Ser Leu Val Asp 150 155 Tyr Thr Lys Glu Asp Lys Thr Phe Phe Gly Ala Phe Leu Leu 170

<210> 1240 <211> 425 <212>Amino acid <213> Homo sapiens

<400> 1240 Phe Val Trp Asp Glu Val Ala Gln Arg Ser Gly Cys Glu Glu Arg Trp Leu Val Ile Asp Arg Lys Val Tyr Asn Ile Ser Glu Phe Thr Arg Arg 25 His Pro Gly Gly Ser Arg Val Ile Ser His Tyr Ala Gly Gln Asp Ala 40 Thr Asp Pro Phe Val Ala Phe His Ile Asn Lys Gly Leu Val Lys Lys 55 Tyr Met Asn Ser Leu Leu Ile Gly Glu Leu Ser Pro Glu Gln Pro Ser 75 Phe Glu Pro Thr Lys Asn Lys Glu Leu Thr Asp Glu Phe Arg Glu Leu 90 Arg Ala Thr Val Glu Arg Met Gly Leu Met Lys Ala Asn His Val Phe 100 105 Phe Leu Leu Tyr Leu Leu His Ile Leu Leu Leu Asp Gly Ala Ala Trp 120 125 Leu Thr Leu Trp Val Phe Gly Thr Ser Phe Leu Pro Phe Leu Leu Cys 135 140 Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp Leu Gln His 150 155 Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp Asn His Leu 165 170 Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro Ala Ser Trp 185 Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn Cys Phe Arg 200 Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Ala Leu Gly Lys 215 220 Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr Met Pro Tyr 230 Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro Ala Leu Leu

245 250 Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile Gln Arg Lys 265 Lys Trp Val Asp Leu Ala Trp Met Ile Thr Phe Tyr Val Arg Phe Phe 280 Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu Gly Leu Phe 295 300 Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp Val Thr Gln 310 315 Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn Met Asp Trp 325 330 Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys Ser Ala Phe 345 Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu His His Leu 355 360 Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala Pro Leu Val 375 Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser Lys Pro Leu 390 395 Leu Ser Ala Phe Ala Asp Ile Ile His Ser Leu Lys Glu Ser Gly Gln 405 410 Leu Trp Leu Asp Ala Tyr Leu His Gln 420

<210> 1241 <211> 152 <212>Amino acid <213> Homo sapiens

<400> 1241 Gln Cys Gly Gly Ile Pro Tyr Asn Thr Thr Gln Phe Leu Met Asn Asp 1 5 10 Arg Asp Pro Glu Glu Pro Asn Leu Asp Val Pro His Gly Ile Ser His 25 Pro Gly Ser Ser Gly Glu Ser Glu Ala Gly Asp Ser Asp Gly Arg Gly 40 Arg Ala His Gly Glu Phe Gln Arg Lys Asp Phe Ser Glu Thr Tyr Glu Arg Phe His Thr Glu Ser Leu Gln Gly Arg Ser Lys Gln Glu Leu Val 75 Arg Asp Tyr Leu Glu Leu Glu Lys Arg Leu Ser Gln Ala Glu Glu Glu 90 Thr Arg Arg Leu Gln Gln Leu Gln Ala Cys Thr Gly Gln Gln Ser Cys 105 Arg Gln Val Glu Glu Leu Ala Ala Glu Val Gln Arg Leu Arg Thr Glu 120 Asn Gln Arg Leu Arg Gln Glu Asn Gln Met Trp Asn Arg Glu Gly Cys 135 Arg Cys Asp Glu Glu Pro Gly Thr 150 152

<210> 1242 <211> 191 <212>Amino acid <213> Homo sapiens

<400> 1242 Ser Pro Glu Arg Ser Ser Leu Ser Val Gly Arg Glu Lys Ala Met Glu 10 Val Pro Pro Pro Ala Pro Arg Ser Phe Leu Cys Arg Ala Leu Cys Leu 25 Phe Pro Arg Val Phe Ala Ala Glu Ala Val Thr Ala Asp Ser Glu Val . 40 Leu Glu Glu Arg Gln Lys Arg Leu Pro Tyr Val Pro Glu Pro Tyr Tyr 55 Pro Glu Ser Gly Trp Asp Arg Leu Arg Glu Leu Phe Gly Lys Asp Val 70 75 Thr Gly Ser Leu Phe Arg Ile Asn Val Gly Leu Arg Gly Leu Val Ala 85 90 Gly Gly Ile Ile Gly Ala Leu Leu Gly Thr Pro Val Gly Gly Leu Leu 105 Met Ala Phe Gln Lys Tyr Ser Gly Glu Thr Val Gln Glu Arg Lys Gln 120 Lys Asp Arg Lys Ala Leu His Glu Leu Lys Leu Glu Glu Trp Lys Gly 135 Arg Leu Gln Val Thr Glu His Leu Pro Glu Lys Ile Glu Ser Ser Leu 150 155 Gln Glu Asp Glu Pro Glu Asn Asp Ala Lys Lys Ile Glu Ala Leu Leu 165 170 Asn Leu Pro Arg Asn Pro Ser Val Ile Asp Lys Gln Asp Lys Asp 185

<210> 1243 <211> 381 <212>Amino acid <213> Homo sapiens

<400> 1243 Arg Ser Leu Gly Leu Ala Val Thr Glu Met Val Pro Trp Val Arg Thr 10 Met Gly Gln Lys Leu Lys Gln Arg Leu Arg Leu Asp Val Gly Arg Glu Ile Cys Arg Gln Tyr Pro Leu Phe Cys Phe Leu Leu Cys Leu Ser Ala Ala Ser Leu Leu Asn Arg Tyr Ile His Ile Leu Met Ile Phe 55 Trp Ser Phe Val Ala Gly Val Val Thr Phe Tyr Cys Ser Leu Gly Pro 70 Asp Ser Leu Leu Pro Asn Ile Phe Phe Thr Ile Lys Tyr Lys Pro Lys 8.5 90 Gln Leu Gly Leu Gln Glu Leu Phe Pro Gln Gly His Ser Cys Ala Val 100 105 Cys Gly Lys Val Lys Cys Lys Arg His Arg Pro Ser Leu Leu Leu Glu 115 120 Asn Tyr Gln Pro Trp Leu Asp Leu Lys Ile Ser Ser Lys Val Asp Ala 135 Ser Leu Ser Glu Val Leu Glu Leu Val Leu Glu Asn Phe Val Tyr Pro 150 155 Trp Tyr Arg Asp Val Thr Asp Asp Glu Ser Phe Val Asp Glu Leu Arg 165 170 Ile Thr Leu Arg Phe Phe Ala Ser Val Leu Ile Arg Arg Ile His Lys 185 Val Asp Ile Pro Ser Ile Ile Thr Lys Lys Leu Leu Lys Ala Ala Met

200 Lys His Ile Glu Val Ile Val Lys Ala Arg Gln Lys Val Lys Asn Thr 215 220 Glu Phe Leu Gln Gln Ala Ala Leu Glu Glu Tyr Gly Pro Glu Leu His 225 . 230 235 Val Ala Leu Arg Ser Arg Arg Asp Glu Leu His Tyr Leu Arg Lys Leu 245 250 Thr Glu Leu Peu Pro Tyr Ile Leu Pro Pro Lys Ala Thr Asp Cys 265 Arg Ser Leu Thr Leu Leu Ile Arg Glu Ile Leu Ser Gly Ser Val Phe 280 Leu Pro Ser Leu Asp Phe Leu Ala Asp Pro Asp Thr Val Asn His Leu 295 Leu Ile Ile Phe Ile Asp Asp Ser Pro Pro Glu Lys Ala Thr Glu Pro 310 315 Ala Ser Pro Leu Val Pro Phe Leu Gln Lys Phe Ala Glu Pro Arg Asn 325 330 Lys Lys Pro Ser Val Leu Lys Leu Glu Leu Lys Gln Ile Arg Glu Gln 345 Gln Asp Leu Leu Phe Arg Phe Met Asn Phe Leu Lys Gln Glu Gly Ala 355 360 Val His Val Leu His Val Leu Phe Asp Cys Gly Gly Ile 375

<210> 1244 <211> 371 <212>Amino acid <213> Homo sapiens

<400> 1244 Gln Ser Leu Ala Glu Val Leu Gln Gln Leu Gly Ala Ser Ser Glu Leu 5 10 Gln Ala Val Leu Ser Tyr Ile Phe Pro Thr Tyr Gly Val Thr Pro Asn 25 His Ser Ala Phe Ser Met His Ala Leu Leu Val Asn His Tyr Met Lys 40 Gly Gly Phe Tyr Pro Arg Gly Val Thr Ser Glu Ile Ala Phe His Thr Ile Pro Val Ile Gln Arg Ala Gly Gly Ala Val Leu Thr Lys Ala Thr 75 Val Gln Ser Val Leu Leu Asp Ser Ala Gly Lys Ala Cys Gly Val Ser 90 Val Lys Lys Gly His Glu Leu Val Asn Ile Tyr Cys Pro Ile Val Val 100 105 Ser Asn Ala Gly Leu Phe Asn Thr Tyr Glu His Leu Leu Pro Gly Asn 120 Ala Arg Cys Leu Pro Gly Val Lys Gln Gln Leu Gly Thr Val Arg Pro 135 Gly Leu Gly Met Thr Ser Val Phe Ile Cys Leu Arg Gly Thr Lys Glu 150 Asp Leu His Leu Pro Ser Thr Asn Tyr Tyr Val Tyr Tyr Asp Thr Asp 165 170 Met Asp Gln Ala Met Glu Arg Tyr Val Ser Met Pro Arg Glu Glu Ala 185 Ala Glu His Ile Pro Leu Leu Phe Phe Ala Phe Pro Ser Ala Lys Asp 200 205 Pro Thr Trp Glu Asp Arg Phe Pro Gly Arg Ser Thr Met Ile Met Leu 215 Ile Pro Thr Ala Tyr Glu Trp Phe Glu Glu Trp Gln Ala Glu Leu Lys

225 230 Gly Lys Arg Gly Ser Asp Tyr Glu Thr Phe Lys Asn Ser Phe Val Glu 245 250 Ala Ser Met Ser Val Val Leu Lys Leu Phe Pro Gln Leu Glu Gly Lys 260 265 Val Glu Ser Val Thr Ala Gly Ser Pro Leu Thr Asn Gln Phe Tyr Leu 280 Ala Ala Pro Arg Gly Ala Cys Tyr Gly Ala Asp His Asp Leu Gly Arg 295 Leu His Pro Cys Val Met Ala Ser Leu Arg Ala Gln Ser Pro Ile Pro 310 315 Asn Leu Tyr Leu Thr Gly Gln Asp Ile Phe Thr Cys Gly Leu Val Gly 325 330 Ala Leu Gln Gly Ala Leu Leu Cys Ser Ser Thr Ile Leu Lys Arg Asn 340 345 Leu Tyr Ser Asp Leu Lys Asn Leu Asp Ser Arg Ile Arg Ala Gln Lys 360 Lys Lys Asn 370 371

<210> 1245 <211> 295 <212>Amino acid <213> Homo sapiens

<400> 1245 Arg Pro Gln Glu Thr Arg Val Leu Gln Val Ser Cys Gly Arg Ala His Ser Leu Val Leu Thr Asp Arg Glu Gly Val Phe Ser Met Gly Asn Asn 25 Ser Tyr Gly Gln Cys Gly Arg Lys Val Val Glu Asn Glu Ile Tyr Ser 40 Glu Ser His Arg Val His Arg Met Gln Asp Phe Asp Gly Gln Val Val Gln Val Ala Cys Gly Gln Asp His Ser Leu Phe Leu Thr Asp Lys Gly 75 Glu Val Tyr Ser Cys Gly Trp Gly Ala Asp Gly Gln Thr Gly Leu Gly 85 90 His Tyr Asn Ile Thr Ser Ser Pro Thr Lys Leu Gly Gly Asp Leu Ala 105 Gly Val Asn Val Ile Gln Val Ala Thr Tyr Gly Asp Cys Cys Leu Ala 120 125 Val Ser Ala Asp Gly Gly Leu Phe Gly Trp Gly Asn Ser Glu Tyr Leu 135 140 Gln Leu Ala Ser Val Thr Asp Ser Thr Gln Val Asn Val Pro Arg Cys 150 155 Leu His Phe Ser Gly Val Gly Lys Val Arg Gln Ala Ala Cys Gly Gly 165 170 Thr Gly Cys Ala Val Leu Asn Gly Glu Gly His Val Phe Val Trp Gly 185 Tyr Gly Ile Leu Gly Lys Gly Pro Asn Leu Val Glu Ser Ala Val Pro 200 205 Glu Met Ile Pro Pro Thr Leu Phe Gly Leu Thr Glu Phe Asn Pro Glu 215 220 Ile Gln Val Ser Arg Ile Arg Cys Gly Leu Ser His Phe Ala Ala Leu 230 235 Thr Asn Lys Gly Glu Leu Phe Val Trp Gly Lys Asn Ile Arg Gly Cys 245 250 Leu Gly Ile Gly Arg Leu Glu Asp Gln Tyr Phe Pro Trp Arg Val Thr

Met Pro Gly Glu Pro Val Asp Val Ala Cys Gly Val Asp His Met Val 275

Thr Leu Ala Lys Ser Phe Ile 290

<210> 1246 <211> 172 <212>Amino acid <213> Homo sapiens

<400> 1246 Leu Pro Phe Arg Glu Trp Leu Met Ile Val Val Ser Leu Ser Ala Ala Ala Val Ala Ala Phe Met Ala Lys Cys Arg Met Val Leu Ser Ser 25 Arg Tyr Phe Cys Ser His Phe Val Met Ser Ala Ser Arg Ala Arg Ile 40 Arg Ser Ser Phe Ser Arg Thr Ser Ser Arg Arg Ala Gly Ala Leu Tyr 55 Ser Gly Met Leu Ala Gly Trp Pro Phe Pro Cys Phe Cys Trp Val Leu 70 . 75 Ser Ala Ser Ser Ser Leu Ser Ser Gln Val Arg Ser Leu Arg Ser Ile 90 Cys Ser Arg Phe Ser His Ala Asp Cys Ser Trp Val Arg Ala Cys Cys 100 105 Ser Phe Ser Thr Phe Ser Thr Tyr Ala Cys Phe Ser Arg Asn Ser Ser 115 120 125 Ser Ser Leu Met Thr Leu Ala Trp Ala Leu Leu Lys Ala Trp Ser Arg 130 Ile Ser Met Cys Leu Arg Trp Ser Ser Leu Ala Val Arg Thr Ala Ala 145 150 155 Asn Ser Ile Ser Asn Phe Ser Phe Ser Phe Lys Asn 165 170 172

<210> 1247 <211> 361 <212>Amino acid <213> Homo sapiens

<400> 1247 Met Gln Ala Val Arg Ala Thr Ala Ser Gln Ser Leu Ser Cys Ala Arg 1 5 10 Ala Pro Arg Glu Pro Thr Gln His Ala Leu Arg Ala His Trp Phe Pro 20 25 Pro Ala Ala Val Gln Pro Ser Pro His Ser Gly Val Ala Ala Ala 3.5 Ala Gly Thr Trp Ser Ser Ala Phe Arg Gly Glu His Pro Leu Val Ser 60 Ser Gly Leu Leu Gly Val Arg Glu Gln Ser Phe Arg Leu Leu Arg 70 75 Ser Lys Ala Gly Thr His Met Tyr Leu Glu His Thr Ser His Cys Pro His His Asp Asp Asp Thr Ala Met Asp Thr Pro Leu Pro Arg Pro Arg

100 105 110 Pro Leu Leu Ala Val Glu Arg Thr Gly Gln Arg Pro Leu Trp Ala Pro 120 Ser Leu Glu Leu Pro Lys Pro Asp Met Gln Pro Leu Pro Ala Gly Ala 140 Phe Leu Glu Glu Val Ala Glu Gly Thr Pro Ala Gln Thr Glu Ser Glu 150 155 Pro Lys Val Leu Asp Pro Glu Glu Asp Leu Leu Cys Ile Ala Lys Thr 165 170 175 Phe Ser Tyr Leu Arg Glu Ser Gly Trp Tyr Trp Gly Ser Ile Thr Ala 185 Ser Glu Ala Arg Gln His Leu Gln Lys Met Pro Glu Gly Thr Phe Leu 200 205 Val Arg Asp Ser Thr His Pro Ser Tyr Leu Phe Thr Leu Ser Val Lys 215 Thr Thr Arg Gly Pro Thr Asn Val Arg Ile Glu Tyr Ala Asp Ser Ser 230 235 Phe Arg Leu Asp Ser Asn Cys Leu Ser Arg Pro Arg Ile Leu Ala Phe 245 250 Pro Asp Val Val Ser Leu Val Gln His Tyr Val Ala Ser Cys Thr Ala 260 265 270 Asp Thr Arg Ser Asp Ser Pro Asp Pro Ala Pro Thr Pro Ala Leu Pro 280 Met Pro Lys Glu Asp Ala Pro Ser Asp Pro Ala Leu Pro Ala Pro Pro 295 300 Pro Ala Thr Ala Val His Leu Lys Leu Val Gln Pro Phe Val Arg Arg 310 315 Ser Ser Ala Arg Ser Leu Gln His Leu Cys Arg Leu Val Ile Asn Arg 325 330 Leu Val Ala Asp Val Asp Cys Leu Pro Leu Pro Arg Arg Met Ala Asp 340 345 Tyr Leu Arg Gln Tyr Pro Phe Gln Leu 355 360 361

<210> 1248 <211> 279 <212>Amino acid <213> Homo sapiens

<400> 1248 Phe Val Asp Ile Phe Gln Arg Trp Lys Glu Cys Arg Gly Lys Ser Pro Ala Gln Ala Glu Leu Ser Tyr Leu Asn Lys Ala Lys Trp Leu Glu Met Tyr Gly Val Asp Met His Val Val Arg Gly Arg Asp Gly Cys Glu Tyr Ser Leu Gly Leu Thr Pro Thr Gly Ile Leu Ile Phe Glu Gly Ala Asn 55 Lys Ile Gly Leu Phe Phe Trp Pro Lys Ile Thr Lys Met Asp Phe Lys 70 Lys Ser Lys Leu Thr Leu Val Val Val Glu Asp Asp Asp Gln Gly Arg 85 90 Glu Gln Glu His Thr Phe Val Phe Arg Leu Asp Ser Ala Arg Thr Cys 105 Lys His Leu Trp Lys Cys Ala Val Glu His His Ala Phe Phe Arg Leu 120 Arg Thr Pro Gly Asn Ser Lys Ser Asn Arg Ser Asp Phe Ile Arg Leu 135 Gly Ser Arg Phe Arg Phe Ser Gly Arg Thr Glu Tyr Gln Ala Thr His

145 150 155 Gly Ser Arg Leu Arg Arg Thr Ser Thr Phe Glu Arg Lys Pro Ser Lys 165 170 Arg Tyr Pro Ser Arg Arg His Ser Thr Phe Lys Ala Ser Asn Pro Val 185 Ile Ala Ala Gln Leu Cys Ser Lys Thr Asn Pro Glu Val His Asn Tyr 200 Gln Pro Gln Tyr His Pro Asn Ile His Pro Ser Gln Pro Arg Trp His 215 220 Pro His Ser Pro Asn Val Arg Pro Ser Phe Gln Asp Asp Arg Ser His 230 235 Trp Lys Ala Ser Ala Ser Gly Asp Asp Ser His Phe Asp Tyr Val His 250 Asp Gln Asn Gln Lys Asn Leu Gly Gly Met Gln Ser Met Met Tyr Arg 265 Asp Lys Leu Met Thr Ala Leu 275

<210> 1249

<211> 255

<400> 1249

<212>Amino acid <213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(255)

<223> X = any amino acid or stop code

Gly Gly Ile Arg Leu Ile Gln Lys Leu Thr Trp Arg Ser Arg Gln Gln 10 Asp Arg Glu Asn Cys Ala Met Lys Gly Lys His Lys Asp Glu Cys His Asn Phe Ile Lys Val Phe Val Pro Arg Asn Asp Glu Met Val Phe Val Cys Gly Thr Asn Ala Phe Asn Pro Met Cys Arg Tyr Tyr Arg Val Ser 55 Ile Phe Tyr Val Ile Cys Phe Phe Xaa Ser Thr Phe Leu Pro Ser Leu 70 75 Ile Cys Cys Xaa Ser Xaa Asn Leu Ser Ala Phe Gln Xaa Phe Val Leu 90 Ser Leu Val Gln Xaa Lys Asn Lys Asp Arg Ile Leu Gln Met Glu Phe 105 Xaa Tyr Lys Xaa Asn Ser Ile Ala Phe Lys Arg Ala Arg Xaa Ile Asp 120 125 Met Thr Leu Ala Ile Tyr Phe Ser Phe Val Leu Ser Thr Leu Xaa Tyr 135 140 Asp Gly Glu Glu Ile Ser Gly Leu Ala Arg Cys Pro Phe Asp Ala Arg 155 150 Gln Thr Asn Gly Ala Leu Phe Ala Asp Gly Lys Leu Tyr Ser Ala Thr 170 Val Ala Asp Phe Leu Ala Ser Asp Ala Val Ile Tyr Arg Ser Met Gly 185 Asp Gly Ser Ala Leu Arg Thr Ile Lys Tyr Asp Ser Lys Trp Ile Lys 200 Glu Pro His Phe Leu Tyr Ala Ile Lys Tyr Gly Asn Tyr Val Tyr Phe 215 220 Ser Phe Arg Glu Ile Val Ala Thr Xaa Xaa Leu Gly Lys Ala Val Asp 230

Ser Arg Val Ala Arg Tyr Glu Lys Gln Leu Val Gly Pro Thr Val 245 250 255

<210> 1250 <211> 307 <212>Amino acid <213> Homo sapiens

<400> 1250 Ala Arg Ala Leu Ala Arg Glu Arg Glu Ser Glu Ser Ala Arg Ala Asp Asp Val Thr Leu Gly Val Ser Ala Ile Leu Ala Val Asp Arg Gly Gly 25 Asn Leu Gly Ser Ala Asp Gly Trp Ala Tyr Ile Asp Val Glu Val Arg 40 Arg Pro Trp Ala Phe Val Gly Pro Gly Cys Ser Arg Ser Ser Gly Asn Gly Ser Thr Ala Tyr Gly Leu Val Gly Ser Pro Arg Trp Leu Ser Pro 70 Phe His Thr Gly Gly Ala Val Ser Leu Pro Arg Arg Pro Arg Gly Pro 90 Gly Pro Val Leu Gly Val Ala Arg Pro Cys Leu Arg Cys Val Leu Arg 105 Pro Glu His Tyr Glu Pro Gly Ser His Tyr Ser Gly Phe Ala Gly Arg 120 Asp Ala Ser Arg Ala Phe Val Thr Gly Asp Cys Ser Glu Ala Gly Leu 135 140 Val Asp Asp Val Ser Asp Leu Ser Ala Ala Glu Met Leu Thr Leu His 150 155 Asn Trp Leu Ser Phe Tyr Glu Lys Asn Tyr Val Cys Val Gly Arg Val 165 170 Thr Gly Arg Phe Tyr Gly Glu Asp Gly Leu Pro Thr Pro Ala Leu Thr 185 Gln Val Glu Ala Ala Ile Thr Arg Gly Leu Glu Ala Asn Lys Leu Gln 200 205 Leu Gln Glu Lys Gln Thr Phe Pro Pro Cys Asn Ala Glu Trp Ser Ser 215 220 Ala Arg Gly Ser Arg Leu Trp Cys Ser Gln Lys Ser Gly Gly Val Ser 230 235 Arg Asp Trp Ile Gly Val Pro Arg Lys Leu Tyr Lys Pro Gly Ala Lys 245 250 Glu Pro Arg Cys Val Cys Val Arg Thr Thr Gly Pro Pro Ser Gly Gln 260 Met Pro Asp Asn Pro Pro His Arg Asn Arg Gly Asp Leu Asp His Pro 280 285 Asn Leu Ala Glu Tyr Thr Gly Cys Pro Pro Leu Ala Ile Thr Cys Ser 295 Phe Pro Leu 305 307

<210> 1251 <211> 100 <212>Amino acid <213> Homo sapiens

<210> 1252 <211> 464 <212>Amino acid <213> Homo sapiens

<400> 1252 Pro Ala Ala Arg Pro Pro Ser Leu Val Arg Leu Ser Pro Ser Pro Pro 10 Lys Pro Arg Ala Arg Ala Pro Gln Ser Val Glu Pro Ala Ala 20 Pro Leu Val Ala Arg Gly Ser Ser Pro Pro Ala Arg Pro Ala Pro Ala Met Val Arg Pro Arg Arg Ala Pro Tyr Arg Ser Gly Ala Gly Gly Pro 55 Leu Gly Gly Arg Gly Arg Pro Pro Arg Pro Leu Val Val Arg Ala Val 70 Arg Ser Arg Ser Trp Pro Ala Ser Pro Arg Gly Pro Gln Pro Pro Arg 85 90 Ile Arg Ala Arg Ser Ala Pro Pro Met Glu Gly Ala Arg Val Phe Gly 105 Ala Leu Gly Pro Ile Gly Pro Ser Ser Pro Gly Leu Thr Leu Gly Gly 120 Leu Ala Val Ser Glu His Arg Leu Ser Asn Lys Leu Leu Ala Trp Ser 135 . 140 Gly Val Leu Glu Trp Gln Glu Lys Arg Arg Pro Tyr Ser Asp Ser Thr 155 Ala Lys Leu Lys Arg Thr Leu Pro Cys Gln Ala Tyr Val Asn Gln Gly 170 Glu Asn Leu Glu Thr Asp Gln Trp Pro Gln Lys Leu Ile Met Gln Leu 185 Ile Pro Gln Gln Leu Leu Thr Thr Leu Gly Pro Leu Phe Arg Asn Ser 200 Gln Leu Ala Gln Phe His Phe Thr Asn Arg Asp Cys Asp Ser Leu Lys 215 220 Gly Leu Cys Arg Ile Met Gly Asn Gly Phe Ala Gly Cys Met Leu Phe 230 235 Pro His Ile Ser Pro Cys Glu Val Arg Val Leu Met Leu Leu Tyr Ser 250 Ser Lys Lys Ile Phe Met Gly Leu Ile Pro Tyr Asp Gln Ser Gly 265 Phe Val Ser Ala Ile Arg Gln Val Ile Thr Thr Arg Lys Gln Ala Val 280

Gly Pro Gly Gly Val Asn Ser Gly Pro Val Gln Ile Val Asn Asn Lys 295 Phe Leu Ala Trp Ser Gly Val Met Glu Trp Gln Glu Pro Arg Pro Glu 310 Pro Asn Ser Arg Ser Lys Arg Trp Leu Pro Ser His Val Tyr Val Asn 330 Gln Gly Glu Ile Leu Arg Thr Glu Gln Trp Pro Arg Lys Leu Tyr Met 345 Gln Leu Ile Pro Gln Gln Leu Leu Thr Thr Leu Val Pro Leu Phe Arg 360 Asn Ser Arg Leu Val Gln Phe His Phe Thr Lys Asp Leu Glu Thr Leu 375 380 Lys Ser Leu Cys Arg Ile Met Asp Asn Gly Phe Ala Gly Cys Val His 395 Phe Ser Tyr Lys Ala Ser Cys Glu Ile Arg Val Leu Met Leu Leu Tyr 405 410 Ser Ser Glu Lys Lys Ile Phe Ile Gly Leu Ile Pro His Asp Gln Gly 425 Asn Phe Val Asn Gly Ile Arg Arg Val Ile Ala Asn Gln Gln Val 440 Leu Gln Arg Asn Leu Glu Gln Gln Gln Gln Arg Gly Met Gly Gly 450 460

<210> 1253 <211> 214 <212>Amino acid <213> Homo sapiens

210

<400> 1253 Gly Arg Pro Ala Leu Gly Arg Glu Ala Pro Pro Gln Ala Gly Leu Ser Ser Thr Pro Pro Pro Cys Ser Glu Thr Cys Thr Met Gly Pro His Ser Ile Leu Arg Thr Val His Cys Arg Pro Thr Lys Thr Pro Pro Glu Pro 40 Ser Ala Glu Pro His Pro Leu Ser Leu Leu Thr Ser Ser Asn Thr Ser 55 Leu Ala Gly Thr Ser Leu Gly Arg Asp Leu Thr Pro Gly Gly Lys 70 Pro Pro Ser Gly Gln Thr Pro Arg Asn Pro Glu Ser Pro Arg His Arg 90 Leu Gly Ser Pro Arg Gly Arg Arg Trp Leu Ala Ser Pro Thr Pro Thr 105 Gly Ser Gly Arg Ser Gly Pro Ala Ser Arg Gly Gln Arg Arg Leu Ser 120 125 Cys Ala Ala Gln Asp Pro Thr Ser Glu Gly Ala Ser Val Gly Ala Met 135 140 Glu Ala Gly Leu Gly Pro Pro Thr Ala Ala Pro Arg Gly Val Val Ser 150 155 Glu Ala Ala Glu Ser Leu Gly Gly Thr Leu Ser Trp Gly Ala Trp Gly 165 170 Arg Pro Pro Ala Gly Pro Ser Gly Leu Ala Gly Arg Arg Ser Arg Arg 185 Glu Ala Leu Arg Pro Asp Arg Lys Glu Ala Ser Val Met Met Ala Ala 195 200 Val Ser Ala Ile Gln Pro

214

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<210> 1254

<211> 198

<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(198)

<223> X = any amino acid or stop code
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<400> 1254 Pro Gly Val Pro Thr His Gly Trp Pro Arg Ser Arg Val Leu Thr Arg 10 Val Arg Gly Ser Arg Gly Ser Gly Lys Met Ala Ala Ala Val Val Leu Ala Ala Gly Leu Arg Ala Ala Arg Arg Ala Val Ala Ala Thr Gly Val Arg Gly Gly Gln Val Arg Gly Ala Ala Gly Val Thr Asp Gly Asn Glu 55 Val Ala Lys Ala Gln Gln Ala Thr Pro Gly Gly Ala Ala Pro Thr Ile 70 75 Phe Ser Arg Ile Leu Asp Lys Ser Leu Pro Ala Asp Ile Leu Tyr Glu 85 Asp Gln Gln Cys Leu Val Phe Arg Asp Val Ala Pro Gln Ala Pro Val 100 105 His Phe Leu Val Ile Pro Lys Lys Pro Ile Pro Arg Ile Ser Gln Ala 120 125 Glu Glu Glu Asp Gln Gln Leu Thr Tyr Val Pro Pro Leu Ser Leu Xaa 135 140 Leu Leu Gly His Leu Leu Leu Val Ala Lys Gln Thr Ala Lys Ala Glu 150 155 160 Gly Leu Gly Asp Gly Tyr Arg Leu Val Ile Asn Asp Gly Lys Leu Gly 170 Ala Gln Ser Val Tyr His Leu His Ile His Val Leu Gly Gly Arg Gln 180 185 Leu Gln Trp Pro Pro Gly 195 198

. <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(458)
 <223> X = any amino acid or stop code

<210> 1255 <211> 458

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Arg Phe Leu Val Ala Phe Ala Tyr Trp Asn His Tyr Leu Ser Cys Thr
                              40
  Ser Pro Cys Ser Cys Tyr Arg Pro Leu Cys Arg Leu Asn Phe Gly Leu
                          55
  Asn Val Val Glu Asn Leu Ala Leu Leu Val Leu Thr Tyr Val Ser Ser
                      70
                                         75
  Ser Glu Asp Phe Thr Trp Val Pro Gly Xaa Gly Arg Ser Gly Glu Val
                  85
                                     90
 Phe Pro Glu Gly Thr Gly Leu Pro Leu Pro His Ser Asp Leu Pro Thr
             100
                                105
 Ser Trp Cys Gly His Ser Leu Gln Cys Gly Ser Gln Ser Ser Phe Pro
                            120
 Pro Ala Ile His Glu Asn Ala Phe Ile Val Phe Ile Ala Ser Ser Leu
                        135
                                     140
 Gly His Met Leu Leu Thr Cys Ile Leu Trp Arg Leu Thr Lys Lys His
                    150
                                       155
 Thr Val Ser Gln Glu Asp Gly Leu Ser Leu Ala Gly Ala Pro Arg Gln
                165
                                    170
 Pro Arg Arg Lys Ser Arg Thr Ser Val Leu Arg Ile Arg Val Met Val
                                185
 Arg Trp Glu Leu Ser Ser Asn Gly Asn Pro Gly Arg Gly Val Leu Gly
                            200
 Leu Gly Leu Gly Leu Gly Asn Lys Leu Arg Val Val Gly Gln Asn Leu
                         215
                                            220
 Gly Leu Xaa His Cys Val Trp Val Val Trp Glu Thr Gly Glu Xaa Lys
                    230
                                        235
 Arg Trp Arg Leu Gln Met Gly Ile Glu Xaa Gly Val Ala Ser Arg Arg
                245
                                    250
 Gln Xaa Val Arg Asn Ser Val Arg Gly Leu Val Cys His Asn Ser Ser
                                265
 Ala Pro Pro Met Tyr Met Gly Phe Phe Ser Pro Thr Val Phe Gly Gly
                            280
 Gly Val Gly Gly Xaa Leu His Val Thr Phe Ile Leu His Pro Pro Glu
                        295
                                            300
· Val Glu Ala Ala Gly Ile Pro Leu Leu Leu Gly Pro Ser Leu Pro Gln
                    310
                                        315
 Arg Gln Gly Arg Glu His Ile Val Val Ile Leu Ala Ala Pro Ala Cys
                325
                                    330
 Ala Pro Phe His Asp Arg Xaa Trp Glu Pro Arg Glu Ile Arg Pro Ser
                               345
 Pro Xaa Glu Leu Gly Leu Arg Gly Glu Pro Thr Leu Ser Tyr Pro Ala
                            360
                                               365
 Ser Cys Arg Val Ile Arg Gln Pro Ile Pro Xaa Asp Arg Lys Ser Tyr
                       375
 Ser Trp Lys Gln Arg Leu Phe Ile Ile Asn Phe Ile Ser Phe Phe Ser
                    390
                                       395
 Ala Leu Ala Val Tyr Phe Arg His Asn Met Tyr Cys Glu Ala Gly Val
                405
                                    410
 Tyr Thr Ile Phe Ala Ile Leu Glu Tyr Thr Val Val Leu Thr Asn Met
                               425
 Ala Phe His Met Thr Ala Trp Trp Asp Phe Gly Asn Lys Glu Leu Leu
                           440
 Ile Thr Ser Gln Pro Glu Glu Lys Arg Phe
                        455
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<210> 1256 <211> 83 <212>Amino acid <213> Homo sapiens

<210> 1257 <211> 203 <212>Amino acid .<213> Homo sapiens

<400> 1257 Pro Arg Val Arg Gly Arg Val Gly Lys Glu Gly Ala Ala Lys Pro 5 Arg Ser Leu Leu Arg Arg Phe Gln Leu Leu Ser Trp Ser Val Cys Gly 25 Gly Asn Lys Asp Pro Trp Val Gln Glu Leu Met Ser Cys Leu Asp Leu 40 Lys Glu Cys Gly His Ala Tyr Ser Gly Ile Val Ala His Gln Lys His 55 60 Leu Leu Pro Thr Ser Pro Pro Ile Ser Gln Ala Ser Glu Gly Ala Ser 75 Ser Asp Ile His Thr Pro Ala Gln Met Leu Leu Ser Thr Leu Gln Ser 90 95 Thr Gln Arg Pro Thr Leu Pro Val Gly Ser Leu Ser Ser Asp Lys Glu 105 Leu Thr Arg Pro Asn Glu Thr Thr Ile His Thr Ala Gly His Ser Leu 120 125 Ala Ala Gly Pro Glu Ala Gly Glu Asn Gln Lys Gln Pro Glu Lys Asn 135 140 Ala Gly Pro Thr Ala Arg Thr Ser Ala Thr Val Pro Val Leu Cys Leu 150 155 Leu Ala Ile Ile Phe Ile Leu Thr Ala Ala Leu Ser Tyr Val Leu Cys 165 170 Lys Arg Arg Arg Gly Gln Ser Pro Gln Ser Ser Pro Asp Leu Pro Val 180 185 His Tyr Ile Pro Val Ala Pro Asp Ser Asn Thr 200 203

<210> 1258 <211> 195 <212>Amino acid <213> Homo sapiens

<400> 1258

Leu Ile Ile Ser Asn Phe Leu Lys Ala Lys Gln Lys Pro Gly Ser Thr 10 Pro Asn Leu Gln Gln Lys Lys Ser Gln Ala Arg Leu Ala Pro Asp Ile 25 Val Ser Ala Ser Gln Tyr Arg Lys Phe Asp Glu Phe Gln Thr Gly Ile 40 Leu Ile Tyr Glu Leu Leu His Gln Pro Asn Pro Phe Glu Val Arg Ala 55 Gln Leu Arg Glu Arg Asp Tyr Arg Gln Glu Asp Leu Pro Pro Leu Pro 75 Ala Leu Ser Leu Tyr Ser Pro Gly Leu Gln Gln Leu Ala His Leu Leu 85 90 Leu Glu Ala Asp Pro Ile Lys Arg Ile Arg Ile Gly Glu Ala Lys Arg 105 Val Leu Gln Cys Leu Leu Trp Gly Pro Arg Arg Glu Leu Val Gln Gln 115 120 Pro Gly Thr Ser Glu Glu Ala Leu Cys Gly Thr Leu His Asn Trp Ile 135 Asp Met Lys Arg Ala Leu Met Met Lys Phe Ala Glu Lys Ala Val 150 155 Asp Arg Arg Gly Val Glu Leu Glu Asp Trp Leu Cys Cys Gln Tyr 165 170 Leu Ala Ser Ala Glu Pro Gly Ala Leu Leu Gln Ser Leu Lys Leu Leu 185 Gln Leu Leu 195

<210> 1259
<211> 672
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(672)
<223> X = any amino acid or stop code

<400> 1259 Lys Arg Gly Leu Ile Val Val Met Ala His Glu Met Ile Gly Thr Gln 10 Ile Val Thr Glu Arg Gly Val Ala Leu Leu Glu Ser Gly Thr Glu Lys Val Leu Leu Ile Asp Ser Arg Pro Phe Val Glu Tyr Asn Thr Ser His 40 Ile Leu Glu Ala Ile Asn Ile Asn Cys Ser Lys Leu Met Lys Arg Arg 55 Leu Gln Gln Asp Lys Val Leu Ile Thr Glu Leu Ile Gln His Ser Ala 75 Lys His Lys Val Asp Ile Asp Cys Ser Gln Lys Val Val Val Tyr Asp 90 Gln Ser Ser Gln Asp Val Ala Ser Leu Ser Ser Asp Cys Phe Leu Thr 100 105 Val Leu Leu Gly Lys Leu Glu Lys Ser Phe Asn Ser Val His Leu Leu 120 125 Ala Gly Gly Phe Ala Glu Phe Ser Arg Cys Phe Pro Gly Leu Cys Glu 135 140 Gly Lys Ser Thr Leu Val Pro Thr Cys Ile Ser Gln Pro Cys Leu Pro 150 155 Val Ala Asn Ile Gly Pro Thr Arg Ile Leu Pro Asn Leu Tyr Leu Gly

165 170 Cys Gln Arg Asp Val Leu Asn Lys Glu Leu Met Gln Gln Asn Gly Ile 185 Gly Tyr Val Leu Asn Ala Ser Asn Thr Cys Pro Lys Pro Asp Phe Ile 200 Pro Glu Ser His Phe Leu Arg Val Pro Val Asn Asp Ser Phe Cys Glu 215 220 Lys Ile Leu Pro Trp Leu Asp Lys Ser Val Asp Phe Ile Glu Lys Ala 230 235 Lys Ala Ser Asn Gly Cys Val Leu Val His Cys Leu Ala Gly Ile Ser 250 Arg Ser Ala Thr Ile Ala Ile Ala Tyr Ile Met Lys Arg Met Asp Met 265 Ser Leu Asp Glu Ala Tyr Arg Phe Val Lys Glu Lys Arg Pro Thr Ile 280 Ser Pro Asn Phe Asn Phe Leu Gly Gln Leu Leu Asp Tyr Glu Lys Lys 295 300 Ile Lys Asn Gln Thr Gly Ala Ser Gly Pro Lys Ser Lys Leu Lys Leu 310 315 Leu His Leu Glu Lys Pro Asn Glu Pro Val Pro Ala Val Ser Glu Gly 325 330 Gly Gln Lys Ser Glu Thr Pro Leu Ser Pro Pro Cys Ala Asp Ser Ala 340 345 Thr Ser Glu Ala Ala Gly Gln Arg Pro Val His Pro Ala Ser Val Pro 360 Ser Val Pro Ser Val Gln Pro Ser Leu Leu Glu Asp Ser Pro Leu Val 375 Gln Ala Leu Ser Gly Leu His Leu Ser Ala Asp Arg Leu Glu Asp Ser 390 395 Asn Lys Leu Lys Arg Ser Phe Ser Leu Asp Ile Lys Ser Val Ser Tyr 410 Ser Ala Ser Met Ala Ala Ser Leu His Gly Phe Ser Ser Ser Glu Asp 425 Ala Leu Glu Tyr Tyr Lys Pro Ser Thr Thr Leu Asp Gly Thr Asn Lys 440 Leu Cys Gln Phe Ser Pro Val Gln Glu Leu Cys Gly Ala Asp Ser Arg 460 Asn Gln Ser Xaa Xaa Gly Gly Ser Gln Pro Ser Pro Arg Ser Cys Arg 470 475 Pro Pro Gly Leu Gln Thr Ala Arg Ala Ser Asp Cys Ile Arg Ser Glu 485 Pro Ala Ala Val Ala Pro Pro Arg Gly Pro Phe Tyr Leu His Cys Ile 505 Glu Val Gly Ala Trp Arg Thr Ile Thr Thr Pro Ala Ser Phe Ser Ala 520 Phe Pro Pro Pro Ala Ala Pro His Glu Val Cys Trp Pro Gly Pro Xaa 535 540 Gly Leu Ala Pro Asp Ile Leu Ala Pro Gln Thr Ser Thr Pro Ser Leu 550 555 Thr Ser Ser Trp Tyr Phe Ala Thr Glu Ser Ser His Phe Tyr Ser Ala 570 Ser Ala Ile Tyr Gly Gly Ser Ala Ser Tyr Ser Ala Tyr Ser Cys Ser 585 Gln Leu Pro Thr Cys Gly Asp Gln Val Tyr Ser Val Arg Arg Gln 600 Lys Pro Ser Asp Arg Ala Asp Ser Arg Arg Ser Trp His Glu Glu Ser 615 620 Pro Phe Glu Lys Gln Phe Lys Arg Arg Ser Cys Gln Met Glu Phe Gly 635 Glu Ser Ile Met Ser Glu Asn Arg Ser Arg Glu Glu Leu Gly Lys Val 650 Gly Ser Gln Ser Ser Phe Ser Gly Ser Met Glu Ile Ile Glu Val Ser

<210> 1260 <211> 260 <212>Amino acid <213> Homo sapiens

<400> 1260 Ala Ser Ser Ser Lys Arg Val Ser Arg Gln Lys Met Leu Gln Leu Trp 10 Lys Leu Val Leu Cys Gly Val Leu Thr Gly Thr Ser Glu Ser Leu 25 Leu Asp Asn Leu Gly Asn Asp Leu Ser Asn Val Val Asp Lys Leu Glu 40 Pro Val Leu His Glu Gly Leu Glu Thr Val Asp Asn Thr Leu Lys Gly 55 Ile Leu Glu Lys Leu Lys Val Asp Leu Gly Val Leu Gln Lys Ser Ser 75 Ala Trp Gln Leu Ala Lys Gln Lys Ala Gln Glu Ala Glu Lys Leu Leu 90 Asn Asn Val Ile Ser Lys Leu Leu Pro Thr Asn Thr Asp Ile Phe Gly 100 105 Leu Lys Ile Ser Asn Ser Leu Ile Leu Asp Val Lys Ala Glu Pro Ile 120 125 Asp Asp Gly Lys Gly Leu Asn Leu Ser Phe Pro Val Thr Ala Asn Val 135 140 Thr Glu Ala Gly Pro Ile Ile Asp Gln Ile Ile Asn Leu Arg Ala Ser 150 155 Leu Asp Leu Leu Thr Ala Val Thr Ile Glu Thr Asp Pro Gln Thr His 165 170 His Pro Val Ala Gly Leu Gly Glu Cys Ala Arg Asp Pro Thr Ser Ile 185 Ser Leu Cys Leu Leu Asp Lys His Ser Gln Ile Ile Asn Lys Phe Val 200 Asn Ser Val Ile Asn Thr Leu Lys Ser Thr Val Ser Ser Leu Leu Gln 215 220 Lys Glu Ile Cys Pro Leu Ile Arg Ile Phe Ile His Ser Leu Asp Val 230 235 Asn Val Ile Gln Gln Val Val Asp Asn Pro Gln His Lys Thr Gln Leu 250 Gln Thr Leu Ile 260

<210> 1261 <211> 278 <212>Amino acid <213> Homo sapiens

45 Arg Gly Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser 55 60 Ala Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg 70 Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr 100 105 Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys 120 Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys 135 Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu 150 155 Cys Thr Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe 165 170 Ser Gly Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp 185 Tyr Phe Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu 200 205 Ala Ile Ile Tyr Leu Asp Gln Gly Ser Pro Glu Met Asn Ser Thr Ile 215 220 Asn Ile His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly 230 235 Ala Gly Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr 245 250 Pro Lys Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile 260 265 Ile Glu Glu Leu Pro Lys 275 278

<210> 1262 <211> 362 <212>Amino acid <213> Homo sapiens

<400> 1262 Met His Ser Ala Met Leu Gly Thr Arg Val Asn Leu Ser Val Ser Asp 1 5 10 Phe Trp Arg Val Met Met Arg Val Cys Trp Leu Val Arg Gln Asp Ser 20 Arg His Gln Arg Ile Arg Leu Pro His Leu Glu Ala Val Val Ile Gly 40 Arg Gly Pro Glu Thr Lys Ile Thr Asp Lys Lys Cys Ser Arg Gln Gln 55 Val Gln Leu Lys Ala Glu Cys Asn Lys Gly Tyr Val Lys Val Lys Gln 70 Val Gly Val Asn Pro Thr Ser Ile Asp Ser Val Val Ile Gly Lys Asp 90 Gln Glu Val Lys Leu Gln Pro Gly Gln Val Leu His Met Val Asn Glu 105 Leu Tyr Pro Tyr Ile Val Glu Phe Glu Glu Glu Ala Lys Asn Pro Gly 120 Leu Glu Thr His Arg Lys Arg Lys Arg Ser Gly Asn Ser Asp Ser Ile 135 Glu Arg Asp Ala Ala Gln Glu Ala Glu Ala Gly Thr Gly Leu Glu Pro 150 155 Gly Ser Asn Ser Gly Gln Cys Ser Val Pro Leu Lys Lys Gly Lys Asp

165 170 Ala Pro Ile Lys Lys Glu Ser Leu Gly His Trp Ser Gln Gly Leu Lys 180 185 Ile Ser Met Gln Asp Pro Lys Met Gln Val Tyr Lys Asp Glu Gln Val 200 Val Val Ile Lys Asp Lys Tyr Pro Lys Ala Arg Tyr His Trp Leu Val 215 Leu Pro Trp Thr Ser Ile Ser Ser Leu Lys Ala Val Ala Arg Glu His 230 235 Leu Glu Leu Leu Lys His Met His Thr Val Gly Glu Lys Val Ile Val 245 250 Asp Phe Ala Gly Ser Ser Lys Leu Arg Phe Arg Leu Gly Tyr His Ala 260 265 Ile Pro Ser Met Ser His Val His Leu His Val Ile Ser Gln Asp Phe 280 Asp Ser Pro Cys Leu Lys Asn Lys Lys His Trp Asn Ser Phe Asn Thr 295 300 Glu Tyr Phe Leu Glu Ser Gln Ala Val Ile Glu Met Val Gln Glu Ala 310 315 Gly Arg Val Thr Val Arg Asp Gly Met Pro Glu Leu Leu Lys Leu Pro 325 330 Leu Arg Cys His Glu Cys Gln Gln Leu Leu Pro Ser Ile Pro Gln Leu 345 Lys Glu His Leu Arg Lys His Trp Thr Gln

<210> 1263 <211> 618 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature

<222> (1) ... (618)

<223> X = any amino acid or stop code

<400> 1263

Asp Met Ser Asp Thr Ser Glu Ser Gly Ala Gly Leu Thr Arg Phe Gln Ala Glu Ala Ser Glu Lys Asp Ser Ser Ser Met Met Gln Thr Leu Leu 25 Thr Val Thr Gln Asn Val Glu Val Pro Glu Thr Pro Lys Ala Ser Lys 40 Ala Leu Glu Val Ser Glu Asp Val Lys Val Ser Lys Ala Ser Gly Val 55 Ser Lys Ala Thr Glu Val Ser Lys Thr Pro Glu Ala Arg Glu Ala Pro 70 75 Ala Thr Gln Ala Ser Ser Thr Thr Gln Leu Thr Asp Thr Gln Val Leu 90 Ala Ala Glu Asn Lys Ser Leu Ala Ala Asp Thr Lys Lys Gln Asn Ala 105 Asp Pro Gln Ala Val Thr Met Pro Ala Thr Glu Thr Lys Lys Val Ser 120 125 His Val Ala Asp Thr Lys Val Asn Thr Lys Ala Gln Glu Thr Glu Ala 135 140 Ala Pro Ser Gln Ala Pro Ala Asp Glu Pro Glu Pro Glu Ser Ala Ala 155 Ala Gln Ser Gln Glu Asn Gln Asp Thr Arg Pro Lys Val Lys Ala Lys 165 170

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Lys Ala Arg Lys Val Lys His Leu Asp Gly Glu Glu Asp Gly Ser Ser
                                185
Asp Gln Ser'Gln Ala Ser Gly Thr Thr Gly Gly Arg Arg Val Ser Lys
                            200
Ala Leu Met Ala Ser Met Ala Arg Arg Ala Ser Arg Gly Pro Ile Ala
                       215
Phe Trp Ala Arg Arg Ala Ser Arg Thr Arg Leu Ala Cys Phe Gly Pro
                  230
                                       235
Gly Glu Pro Leu Leu Ser Pro Trp Arg Ser Pro Lys Ala Arg Arg Gln
                                   250
Arg Gly Phe Ala Val Arg Val Ala Lys Phe Gln Ser Ser Gln Glu Pro
                               265
Glu Ala Pro Pro Pro Trp Asp Val Ala Leu Leu Gln Gly Arg Ala Asn
                            280
Asp Leu Val Lys Tyr Leu Leu Ala Lys Asp Gln Thr Lys Ile Pro Ile
                       295
Lys Arg Ser Asp Met Leu Lys Asp Ile Ile Lys Glu Tyr Thr Asp Val
                   310
                                       315
Tyr Pro Glu Ile Ile Glu Arg Ala Gly Tyr Ser Leu Glu Lys Val Phe
               325
                                   330
Gly Ile Gln Leu Lys Glu Ile Asp Lys Asn Asp His Leu Tyr Ile Leu
           340
                              345
Leu Ser Thr Leu Glu Pro Thr Asp Ala Gly Ile Leu Gly Thr Thr Lys
       355
                        360
Asp Ser Pro Lys Leu Gly Leu Leu Met Val Leu Leu Ser Ile Ile Phe
                       375
                                          380
Met Asn Gly Asn Arg Ser Ser Glu Ala Val Ile Trp Glu Val Leu Arg
                   390
                                       395
Arg Ser Leu Gly Leu Arg Leu Gly Ile His His Ser Leu Leu Gly Asp
                                   410
Val Lys Lys Leu Ile Thr Asp Glu Val Val Lys Gln Lys Tyr Leu Asp
                              425
Tyr Ala Arg Val Pro His Ser Asn Ser Pro Glu Tyr Glu Phe Phe Trp
                           440
Gly Leu Arg Ser Tyr Tyr Glu Asp Gln Gln Arg Xaa Lys Ser Phe Lys
                       455
Phe Ala Cys Lys Val Gln Lys Lys Asp Pro Lys Glu Trp Ala Ala Gln
                   470
                                      475
Ser Pro Pro Gly Lys Ala Arg Glu Arg Met Glu Ala Asp Leu Lys Ala
               485
                                  490
Ala Ser Xaa Gly Ser Pro Trp Lys Pro Arg Leu Arg Ala Glu Ile Lys
                              505
Ala Arg Met Gly Ile Gly Leu Gly Ser Glu Asn Ala Ala Gly Pro Cys
                          520
Asn Trp Asp Glu Ala Asp Ile Gly Pro Trp Ala Lys Ala Arg Ile Gln
                       535
                                          540
Ala Gly Ala Glu Ala Lys Ala Lys Ala Gln Glu Ser Gly Ser Ala Ser
                  550
                                     555
Thr Gly Ala Ser Thr Ser Thr Asn Asn Ser Ala Ser Ala Ser Ala Ser
                                   570
Thr Ser Gly Gly Phe Ser Ala Gly Ala Ser Leu Thr Ala Thr Leu Thr
                               585
Phe Gly Leu Phe Ala Gly Leu Gly Gly Ala Gly Ala Ser Thr Ser Gly
                          600
Ser Ser Gly Ala Cys Gly Phe Ser Tyr Lys
                       615
```

<210> 1264 <211> 464 <212>Amino acid <213> Homo sapiens

<220>

<221> misc_feature <222> (1)...(464) <223> X = any amino acid or stop code

<400> 1264 Ala Arg Pro Pro Val Cys Thr Gly Ser Thr Met Ser Leu Thr Val Val 10 Ser Met Ala Cys Val Gly Phe Phe Leu Leu Gln Gly Ala Trp Pro Leu 20 25 Met Gly Gly Gln Asp Lys Pro Phe Leu Ser Ala Arg Pro Ser Thr Val 40 Val Pro Arg Gly Gly His Val Ala Leu Gln Cys His Tyr Arg Arg Gly 55 Phe Asn Asn Phe Met Leu Tyr Lys Glu Asp Arg Ser His Val Pro Ile 70 Phe His Gly Arg Ile Phe Gln Glu Ser Phe Ile Met Gly Pro Val Thr 85 90 Pro Ala His Ala Gly Thr Tyr Arg Cys Arg Gly Ser Arg Pro His Ser 100 105 Leu Thr Gly Trp Ser Ala Pro Ser Asn Pro Leu Val Ile Met Val Thr 115 120 Gly Asn His Arg Lys Pro Ser Leu Leu Ala His Pro Gly Pro Leu Leu 135 140 Lys Ser Gly Glu Thr Val Ile Leu Gln Cys Trp Ser Asp Ile Met Phe 150 155 Glu His Phe Phe Leu His Lys Glu Gly Ile Ser Lys Asp Pro Ser Arg 165 170 Leu Val Gly Gln Ile His Asp Gly Val Ser Lys Ala Asn Phe Ser Ile 180 185 Gly Pro Met Met Leu Ala Leu Ala Gly Thr Tyr Arg Cys Tyr Gly Ser 200 Val Thr His Thr Pro Tyr Gln Leu Ser Ala Pro Ser Asp Pro Leu Asp 215 220 Ile Val Val Thr Gly Pro Tyr Glu Lys Pro Ser Leu Ser Ala Gln Pro 230 235 Gly Pro Lys Val Gln Ala Gly Glu Ser Val Thr Leu Ser Cys Ser Ser 245 250 Arg Ser Ser Tyr Asp Met Tyr His Leu Ser Arg Glu Gly Gly Ala His 265 Glu Arg Arg Leu Pro Ala Val Arg Lys Val Asn Arg Thr Phe Gln Ala 280 Asp Phe Pro Leu Gly Pro Ala Thr His Gly Gly Thr Tyr Arg Cys Phe 295 300 Gly Ser Phe Arg His Ser Pro Tyr Glu Trp Ser Asp Pro Ser Asp Pro 310 315 Leu Leu Val Ser Val Thr Gly Asn Pro Ser Ser Ser Trp Pro Ser Pro 325 330 Thr Glu Pro Ser Ser Lys Ser Gly Asn Leu Arg His Leu His Ile Leu 345 Ile Gly Thr Ser Val Val Lys Ile Pro Phe Thr Ile Leu Leu Phe Phe 360 Leu Leu His Arg Trp Cys Ser Asn Lys Lys Asn Ala Ala Val Met Asp 375 380 Gln Glu Pro Ala Gly Asn Arg Val Asn Ser Glu Asp Ser Asp Glu Gln 390 395 Asp His Gln Glu Val Ser Tyr Pro Xaa Leu Glu His Cys Val Phe Thr 405 410 Gln Arg Lys Ile Thr Arg Pro Ser Gln Arg Pro Lys Thr Pro Pro Thr 425 Asp Thr Ser Met Tyr Ile Glu Leu Pro Asn Ala Glu Pro Arg Ser Lys

Val Val Phe Cys Pro Arg Ala Pro Gln Ser Gly Leu Glu Gly Ile Phe 450 455 460 464

<211> 1879
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1879)
<223> X = any amino acid or stop code

<210> 1265

<400> 1265 Leu His Asn Leu Arg Glu Arg Tyr Phe Ser Gly Leu Ile Tyr Thr Tyr Ser Gly Leu Phe Cys Val Val Val Asn Pro Tyr Lys His Leu Pro Ile 25 Tyr Ser Glu Lys Ile Val Asp Met Tyr Lys Gly Lys Lys Arg His Glu 40 Met Pro Pro His Ile Tyr Ala Ile Ala Asp Thr Ala Tyr Arg Ser Met 55 60 Leu Gln Asp Arg Glu Asp Gln Ser Ile Leu Cys Thr Gly Glu Ser Gly 70 75 Ala Gly Lys Thr Glu Asn Thr Lys Lys Val Ile Gln Tyr Leu Ala Val 90 Val Ala Ser Ser His Lys Gly Lys Lys Asp Thr Ser Ile Thr Gly Glu 105 Leu Glu Lys Gln Leu Leu Gln Ala Asn Pro Ile Leu Glu Ala Phe Gly Asn Ala Lys Thr Val Lys Asn Asp Asn Ser Ser Arg Phe Gly Lys Phe 135 140 Ile Arg Ile Asn Phe Asp Val Thr Gly Tyr Ile Val Gly Ala Asn Ile 150 Glu Thr Tyr Leu Leu Glu Lys Ser Arg Ala Ile Arg Gln Ala Arg Asp 165 170 Glu Arg Thr Phe His Ile Phe Tyr Tyr Met Ile Ala Gly Ala Lys Glu 185 Lys Met Arg Ser Asp Leu Leu Leu Glu Gly Phe Asn Asn Tyr Thr Phe 200 Leu Ser Asn Gly Phe Val Pro Ile Pro Ala Ala Gln Asp Asp Glu Met 215 220 Phe Gln Glu Thr Val Glu Ala Met Ala Ile Met Gly Phe Ser Glu Glu 230 235 Glu Gln Leu Ser Ile Leu Lys Val Val Ser Ser Val Leu Gln Leu Gly 250 Asn Ile Val Phe Lys Lys Glu Arg Asn Thr Asp Gln Ala Ser Met Pro 265 Asp Asn Thr Ala Ala Gln Lys Val Cys His Leu Met Gly Ile Asn Val 280 · Thr Asp Phe Thr Arg Ser Ile Leu Thr Pro Arg Ile Lys Val Gly Arg 295 300 Asp Val Val Gln Lys Ala Gln Thr Lys Glu Gln Ala Asp Phe Ala Val 315 Glu Ala Leu Ala Lys Ala Thr Tyr Glu Arg Leu Phe Arg Trp Ile Leu 325

Thr Arg Val Asn Lys Ala Leu Asp Lys Thr His Arg Gln Gly Ala Ser 345 Phe Leu Gly Ile Leu Asp Ile Ala Gly Phe Glu Ile Phe Glu Val Asn 360 Ser Phe Glu Gln Leu Cys Ile Asn Tyr Thr Asn Glu Lys Leu Gln Gln 375 Leu Phe Asn His Thr Met Phe Ile Leu Glu Glu Glu Glu Tyr Gln Arg 390 395 Glu Gly Ile Glu Trp Asn Phe Ile Asp Phe Gly Leu Asp Leu Gln Pro 405 410 Cys Ile Glu Leu Ile Glu Arg Pro Asn Asn Pro Pro Gly Val Leu Ala 425 Leu Leu Asp Glu Glu Cys Trp Phe Pro Lys Ala Thr Asp Lys Ser Phe 440 Val Glu Lys Leu Cys Thr Glu Gln Gly Ser His Pro Lys Phe Gln Lys 455 Pro Lys Gln Leu Lys Asp Lys Thr Glu Phe Ser Ile Ile His Tyr Ala 470 475 Gly Lys Val Asp Tyr Asn Ala Ser Ala Trp Leu Thr Lys Asn Met Asp 485 490 Pro Leu Asn Asp Asn Val Thr Ser Leu Leu Asn Ala Ser Ser Asp Lys 505 Phe Val Ala Asp Leu Trp Lys Asp Val Asp Arg Ile Val Gly Leu Asp 520 Gln Met Ala Lys Met Thr Glu Ser Ser Leu Pro Ser Ala Ser Lys Thr 535 Lys Lys Gly Met Phe Arg Thr Val Gly Gln Leu Tyr Lys Glu Gln Leu 550 555 Gly Lys Leu Met Thr Thr Leu Arg Asn Thr Thr Pro Asn Phe Val Arg 570 Cys Ile Ile Pro Asn His Glu Lys Arg Ser Gly Lys Leu Asp Ala Phe 585 Leu Val Leu Glu Gln Leu Arg Cys Asn Gly Val Leu Glu Gly Ile Arg 600 Ile Cys Arg Gln Gly Phe Pro Asn Arg Ile Val Phe Gln Glu Phe Arg 615 620 Gln Arg Tyr Glu Ile Leu Ala Ala Asn Ala Ile Pro Lys Gly Phe Met 630 635 Asp Gly Lys Gln Ala Cys Ile Leu Met Ile Lys Ala Leu Glu Leu Asp 650 Pro Asn Leu Tyr Arg Ile Gly Gln Ser Lys Ile Phe Phe Arg Thr Gly 660 665 Val Leu Ala His Leu Glu Glu Glu Arg Asp Leu Lys Ile Thr Asp Val Ile Met Ala Phe Gln Ala Met Cys Arg Gly Tyr Leu Ala Arg Lys Ala 695 Phe Ala Lys Arg Gln Gln Gln Leu Thr Ala Met Lys Val Ile Gln Arg 710 715 Asn Cys Ala Ala Tyr Ile Lys Leu Arg Asn Trp Gln Trp Cys Arg Leu 725 730 Phe Thr Lys Val Xaa Pro Leu Leu Gln Val Thr Arg Gln Glu Xaa Glu 745 Met Gln Ala Lys Glu Asp Glu Leu Gln Lys Thr Lys Glu Arg Gln Gln Lys Ala Glu Asn Glu Leu Lys Glu Leu Glu Gln Lys His Ser Gln Leu 775 Thr Glu Glu Lys Asn Leu Leu Gln Glu Gln Leu Gln Ala Glu Thr Glu 790 795 Leu Tyr Ala Glu Ala Glu Glu Met Arg Val Arg Leu Ala Ala Lys Lys 805 810 Gln Glu Leu Glu Glu Ile Leu His Glu Met Glu Ala Arg Leu Glu Glu 825 Glu Glu Asp Arg Gly Gln Gln Leu Gln Ala Glu Arg Lys Lys Met Ala 835 845

Gln Gln Met Leu Asp Leu Glu Glu Gln Leu Glu Glu Glu Glu Ala Ala 855 860 Arg Gln Lys Leu Gln Leu Glu Lys Val Thr Ala Glu Ala Lys Ile Lys 865 . 870 875 Lys Leu Glu Asp Glu Ile Leu Val Met Asp Asp Gln Asn Asn Lys Leu 885 890 Ser Lys Glu Arg Lys Leu Leu Glu Glu Arg Ile Ser Asp Leu Thr Thr 900 905 Asn Leu Ala Glu Glu Glu Lys Ala Lys Asn Leu Thr Lys Leu Lys 920 925 Asn Lys His Glu Ser Met Ile Ser Glu Leu Glu Val Arg Leu Lys Lys 935 940 Glu Glu Lys Ser Arg Gln Glu Leu Glu Lys Leu Lys Arg Lys Leu Glu 950 955 Gly Asp Ala Ser Asp Phe His Glu Gln Ile Ala Asp Leu Gln Ala Gln 965 970 Ile Ala Glu Leu Lys Met Gln Leu Ala Lys Lys Glu Glu Glu Leu Gln 980 985 Ala Ala Leu Ala Arg Leu Asp Asp Glu Ile Ala Gln Lys Asn Asn Ala 1000 1005 Leu Lys Lys Ile Arg Glu Leu Glu Gly His Ile Ser Asp Leu Gln Glu 1015 1020 Asp Leu Asp Ser Glu Arg Ala Ala Arg Asn Lys Ala Glu Lys Gln Lys 1030 1035 Arg Asp Leu Gly Glu Glu Leu Glu Ala Leu Lys Thr Glu Leu Glu Asp 1045 1050 Thr Leu Asp Ser Thr Ala Thr Gln Gln Glu Leu Arg Ala Lys Arg Glu 1065 1070 1060 Gln Glu Val Thr Val Leu Lys Arg Ala Leu Asn Glu Glu Thr Arg Ser 1080 1085 His Glu Ala Gln Val Gln Glu Met Arg Gln Lys His Ala Gln Ala Val 1095 1100 Gln Ser Leu Thr Glu Gln Leu Glu Gln Xaa Lys Arg Ala Lys Ala Asn 1110 1115 1120 Leu Asp Lys Asn Lys Gln Thr Leu Glu Lys Glu Asn Thr Asp Leu Ala 1125 1130 1135 Gly Glu Leu Arg Val Leu Gly Gln Ala Lys Gln Glu Val Glu His Arg 1140 1145 1150 Met Lys Lys Leu Gln Ala Gln Val Gln Glu Leu Gln Ser Lys Cys Ser 1160 1165 Asp Gly Glu Arg Ala Arg Ala Glu Leu Asn Asp Lys Val His Lys Leu 1175 1180 Gln Asn Glu Val Glu Ser Val Thr Gly Met Leu Asn Glu Ala Glu Gly 1190 1195 Lys Ala Ile Lys Leu Ala Lys Asp Val Ala Ser Leu Ser Ser Gln Leu 1205 1210 Gln Asp Thr Gln Glu Leu Leu Gln Glu Glu Ser Arg Gln Lys Leu Asn 1220 1225 1230 Val Ser Thr Ser Leu Arg Gln Leu Glu Glu Glu Arg Asn Ser Leu Gln 1235 · 1240 1245 Asp Gln Leu Asp Glu Glu Met Glu Ala Lys Gln Asn Leu Glu Arg His 1255 1260 Ile Ser Thr Leu Asn Ile Gln Leu Ser Asp Ser Lys Lys Leu Gln 1270 1275 Asp Phe Ala Ser Thr Val Glu Ala Leu Glu Glu Gly Lys Lys Arg Phe 1285 1290 Gln Lys Glu Ile Glu Asn Leu Thr Gln Gln Tyr Glu Glu Lys Ala Ala 1300 1305 1310 Ala Tyr Asp Lys Leu Glu Lys Thr Lys Asn Arg Leu Gln Gln Glu Leu 1315 1320 1325 Asp Asp Leu Val Val Asp Leu Asp Asn Gln Arg Gln Leu Val Ser Asn 1330 1335 1340 Leu Glu Lys Lys Gln Arg Lys Phe Asp Gln Leu Leu Ala Glu Glu Lys 1350 1355

Asn Ile Ser Ser Lys Tyr Ala Asp Glu Arg Asp Arg Val Glu Ala Glu 1365 1370 1375 Ala Arg Glu Lys Glu Thr Lys Ala Leu Ser Leu Ala Arg Ala Leu Glu 1380 1385 1390 Glu Ala Leu Glu Ala Lys Glu Glu Leu Glu Arg Thr Asn Lys Met Leu 1395 1400 1405 Lys Ala Glu Met Gly Arg Pro Gly Ser Ala Ser Lys Asp Asp Val Gly 1410 1415 1420 Gln Glu Leu Ser His Asp Leu Glu Lys Ser Lys Arg Ala Leu Gly Asp 1425 1430 1435 1440 Pro Arg Leu Glu Glu Met Lys Thr Gln Leu Glu Glu Leu Gly Arg Thr 1445 1450 1455 Glu Leu Ala Ser Pro Arg Arg Asp Ala Lys Leu Arg Leu Glu Val Asn 1460 1465 1470 Met Gln Ala Pro Ser Arg Ala Ser Phe Glu Arg Asp Leu Gln Ala Arg 1480 1485 Thr Glu Gln Asn Glu Glu Ser Arg Arg His Leu Gln Arg Gln Leu His 1495 1500 Glu Tyr Glu Thr Glu Leu Glu Asp Glu Arg Lys Gln Arg Ala Leu Ala 1505 1510 1515 Ala Ala Lys Ile Lys Leu Gly Trp Asp Pro Val Arg Thr Leu Asp 1525 1530 1535 Leu Xaa Ala Asp Ser Ala Ile Lys Gly Arg Gly Gly Lys Ala Ile Lys 1540 1545 Gln Leu Arg Lys Leu Gln Ala Gln Met Lys Asp Phe Gln Arg Glu Leu 1555 1560 1565 Glu Asp Ala Arg Ala Ser Arg Asp Glu Ile Phe Ala Thr Ala Lys Glu 1570 1575 1580 Asn Glu Lys Lys Ala Lys Ser Leu Glu Ala Asp Leu Met Gln Leu Gln 1590 1595 Glu Asp Leu Ala Ala Glu Glu Gly Arg Lys Gln Ala Asp Leu Glu 1605 1610 Lys Glu Glu Leu Ala Glu Glu Leu Ala Ser Ser Leu Ser Gly Arg Asn 1620 1625 Ala Leu Gln Asp Glu Lys Arg Arg Leu Glu Ala Arg Ile Ala Gln Leu 1635 1640 1645 Glu Glu Glu Leu Glu Glu Glu Gln Gly Asn Met Glu Ala Met Ser Asp 1655 1660 Arg Val Arg Lys Ala Thr Gln Gln Ala Glu Gln Leu Ser Asn Glu Leu 1670 1675 Ala Thr Glu Arg Ser Thr Ala Gln Lys Asn Glu Ser Ala Arg Gln Gln 1685 1690 1695 Leu Glu Arg Gln Asn Lys Glu Leu Arg Ser Lys Leu His Glu Met Glu 1700 1705 1710 Gly Ala Val Lys Ser Lys Phe Lys Ser Thr Ile Ala Ala Leu Glu Ala 1715 1720 1725 Lys Ile Ala Gln Leu Glu Glu Gln Val Glu Gln Glu Ala Arg Glu Lys 1730 1735 1740 Gln Ala Ala Thr Lys Ser Leu Lys Gln Lys Asp Lys Lys Leu Lys Glu 1745 1750 1755 Ile Leu Leu Gln Val Glu Asp Glu Arg Lys Met Ala Glu Gln Tyr Lys 1765 1770 1775 Glu Gln Ala Glu Lys Gly Asn Ala Arg Val Lys Gln Leu Lys Arg Gln 1780 1785 1790 Leu Glu Glu Ala Glu Glu Glu Ser Gln Arg Ile Asn Ala Asn Arg Arg 1795 1800 1805 Lys Leu Gln Arg Glu Leu Asp Glu Ala Thr Glu Ser Asn Glu Ala Met 1815 1820 Gly Arg Glu Val Asn Ala Leu Lys Ser Lys Leu Arg Arg Gly Asn Glu 1830 1835 1840 Thr Ser Phe Val Pro Ser Arg Arg Ser Gly Gly Arg Arg Val Ile Glu 1850 1855 Asn Ala Asp Gly Ser Glu Glu Glu Thr Asp Thr Arg Asp Ala Asp Phe 1860 1865 1870

Asn Gly Thr Lys Ala Ser Glu 1875 1879

> <210> 1266 <211> 257 <212>Amino acid <213> Homo sapiens

<400> 1266 Lys Leu His Phe Ala Lys Ser Leu Asn Ser Glu Leu Ser Cys Ser Thr 10 Arg Glu Ala Met Gln Asp Glu Asp Gly Tyr Ile Thr Leu Asn Ile Lys 20 25 Thr Arg Lys Pro Ala Leu Val Ser Val Gly Pro Ala Ser Ser Ser Trp 40 Trp Arg Val Met Ala Leu Ile Leu Leu Ile Leu Cys Val Gly Met Val 55 Val Gly Leu Val Ala Leu Gly Ile Trp Ser Val Met Gln Arg Asn Tyr 70 75 Leu Gln Asp Glu Asn Glu Asn Arg Thr Gly Thr Leu Gln Gln Leu Ala 90 Lys Arg Phe Cys Gln Tyr Val Val Lys Gln Ser Glu Leu Lys Gly Thr 105 Phe Lys Gly His Lys Cys Ser Pro Cys Asp Thr Asn Trp Arg Tyr Tyr 120 Gly Asp Ser Cys Tyr Gly Phe Phe Arg His Asn Leu Thr Trp Glu Glu 135 Ser Lys Gln Tyr Cys Thr Asp Met Asn Ala Thr Leu Leu Lys Ile Asp 150 155 Asn Arg Asn Ile Val Glu Tyr Ile Lys Ala Arg Thr His Leu Ile Arg 165 170 · 175 Trp Val Gly Leu Ser Arg Gln Lys Ser Asn Glu Val Trp Lys Trp Glu 185 190 Asp Gly Ser Val Ile Ser Glu Asn Met Phe Glu Phe Leu Glu Asp Gly 200 Lys Gly Asn Met Asn Cys Ala Tyr Phe His Asn Gly Lys Met His Pro 215 220 Thr Phe Cys Glu Asn Lys His Tyr Leu Met Cys Glu Arg Lys Ala Gly 235 240 230 His Asp Pro Arg Trp Thr Gln Leu Pro Leu Met Pro Lys Arg Trp Thr 245 Gly 257

<210> 1267 <211> 208 <212>Amino acid <213> Homo sapiens

Val Ser Ile Asn Gln Gly His Asn Ala Pro Trp Lys Ala Ala Gly Ser Leu Pro Leu Lys Ala Ala Tyr Cys Gln Gly Phe Ser Pro Cys Asp Cys 55 Leu Lys Tyr Gly Ser Trp Asp Glu Lys Asp Leu Met Val Pro Gln Pro 70 75 Asp Thr His Lys Gly Ser Val Leu Arg Trp Ile Ser Lys Arg Gly Lys 85 90 Pro Leu Ala Val Glu Met Glu Glu Gly His Cys Leu Cys Leu Pro Leu 100 105 Gly Thr Glu Cys Leu Gly Val Lys Pro Ile Val His Leu Phe Asn Ser 120 Glu Met Gly Glu Lys Arg Pro Val Ala Gly Ala Arg His Val Gly Ser 135 140 Ser Ala Ala Leu Leu Phe Phe Thr Pro Leu Arg Cys Leu Gly Glu 150 155 Lys His Lys Ser Gly Leu Arg Ala Arg Pro Gly Ile Val Pro Ser Leu 165 . 170 Glu Leu Asn Tyr Asp Ile Asp Ser Phe Ala His Met Phe Phe Ser Val 180 185 Asp Leu Leu Ile Ile Thr Leu Leu Ser Tyr Tyr Ile Pro Phe Cys 200

<210> 1268 <211> 158 <212>Amino acid <213> Homo sapiens

<400> 1268 Met Trp Trp Arg Leu Ala Pro Thr Gln Ala Ile Trp Arg Ala Ala Gly 10 Cys Cys Met Arg Phe Ser Arg Arg Ser Thr Cys Cys Leu Ala 20 Ser Cys Ile Phe Leu Leu Tyr Lys Ile Val Arg Gly Asp Gln Pro Ala 40 Ala Lys Arg Arg Gln Arg Arg Arg Ala Ala Pro Ser Ala Pro Pro Gln Ala Ala Arg Leu His Pro Pro Pro Lys Leu Arg Arg Phe Asp Gly 70 Val Gln Asp Pro Ala Pro Tyr Ser Trp Ala Ile Asn Gly Lys Val Phe 85 90 Asp Val Thr Gln Arg Pro Ala Asn Phe Leu Arg Gly Pro Arg Gly Pro Glu Thr Leu Ser Asp Trp Glu Ser Gln Phe Thr Phe Lys Tyr His His 120 125 Val Gly Lys Leu Leu Lys Glu Gly Glu Glu Pro Thr Val Tyr Ser Asp 135 Glu Glu Glu Pro Lys Asp Glu Ser Ala Arg Lys Asn Asp * 150 155

<210> 1269 <211> 178 <212>Amino acid <213> Homo sapiens

<400> 1269 Gly Pro Arg Met Ala Lys Phe Leu Ser Gln Asp Gln Ile Asn Glu Tyr 10 Lys Glu Cys Phe Ser Leu Tyr Asp Lys Gln Gln Arg Gly Lys Ile Lys 25 Ala Thr Asp Leu Met Val Ala Met Arg Cys Leu Gly Ala Ser Pro Thr 40 Pro Gly Glu Val Gln Arg His Leu Gln Thr His Gly Ile Asp Gly Asn Gly Glu Leu Asp Phe Ser Thr Phe Leu Thr Ile Met His Met Gln Ile 70 75 Lys Gln Glu Asp Pro Lys Lys Glu Ile Leu Leu Ala Met Leu Met Val 90 Asp Lys Glu Lys Lys Gly Tyr Val Met Ala Ser Asp Leu Arg Ser Lys 100 105 Leu Thr Ser Leu Gly Glu Lys Leu Thr His Lys Glu Val Asp Asp Leu 120. Phe Arg Glu Ala Asp Ile Glu Pro Asn Gly Lys Val Lys Tyr Asp Glu 135 140 Phe Ile His Lys Ile Thr Leu Leu Pro Gly Arg Asp Leu Leu Lys Glu 150 155 Glu Asn Gly Arg Ala Ser Pro Gly Pro Glu Asn Leu Glu Gln Leu Ile 165 170 Phe Leu 178

<210> 1270 <211> 457 <212>Amino acid <213> Homo sapiens

<400> 1270 Ala Asp Pro His Thr Thr Val Ile Arg Phe Phe Pro Ala Ala Ser Ala Thr Lys Arg Val Leu Pro Pro Val Leu Arg Val Ser Ser Pro Arg Thr 25 Trp Asn Pro Asn Val Pro Glu Ser Pro Arg Ile Pro Ala Pro Arg Leu 40 Pro Lys Arg Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu 55 60 Cys Ala Ala Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln 70 75 Ser Lys Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala 90 His Gly Leu Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg 105 Thr Arg Ser Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly 120 Ser Ala Cys Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro 135 140 Glu Ser Arg Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu 150 155 Lys Ala Gln Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln 165 170 Gln Gln Arg His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln 185

Ser Gln Phe Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala 200 Lys Pro Ala Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp 215 Pro Ala His Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln 230 235 Glu Leu Phe Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln 245 250 Pro Gln Gly Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp 260 265 Gly Gly Trp Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe 280 Asn Arg Pro Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly 295 Glu Phe Trp Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg 310 Asn Ser Arg Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu 325 330 Leu Leu Gln Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser 340 345 Leu Gln Leu Thr Ala Pro Val Ala Gly Gln Leu Gly Ala Thr Thr Val 360 Pro Pro Ser Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His 375 Asp Leu Arg Arg Asp Lys Asn Cys Ala Lys Ser Leu Ser Gly Gly Trp 390 395 Trp Phe Gly Thr Cys Ser His Ser Asn Leu Asn Gly Gln Tyr Phe Arg 405 410 Ser Ile Pro Gln Gln Arg Gln Lys Leu Lys Lys Gly Ile Phe Trp Lys 420 425 Thr Trp Arg Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile 440 445 Gln Pro Met Ala Ala Glu Ala Ala Ser 455

<210> 1271 <211> 394 <212>Amino acid <213> Homo sapiens

<400> 1271 Ala Leu Asp Phe Gly Asp Ser Cys Gln Trp Pro Arg Pro Gln Asp Thr Met Lys Gln Leu Pro Val Leu Glu Pro Gly Asp Lys Pro Arg Lys Ala Thr Trp Tyr Thr Leu Thr Val Pro Gly Asp Ser Pro Cys Ala Arg Val Gly His Ser Cys Ser Tyr Leu Pro Pro Val Gly Asn Ala Lys Arg Gly 55 Lys Val Phe Ile Val Gly Gly Ala Asn Pro Asn Arg Ser Phe Ser Asp 70 Val His Thr Met Asp Leu Gly Lys His Gln Trp Asp Leu Asp Thr Cys 90 Lys Gly Leu Leu Pro Arg Tyr Glu His Ala Ser Phe Ile Pro Ser Cys 105 Thr Pro Asp Arg Ile Trp Val Phe Gly Gly Ala Asn Gln Ser Gly Asn 120 Arg Asn Cys Leu Gln Val Leu Asn Pro Glu Thr Arg Thr Trp Thr Thr 140

Pro Glu Val Thr Ser Pro Pro Pro Ser Pro Arg Thr Phe His Thr Ser 150 155 Ser Ala Ala Ile Gly Asn Gln Leu Tyr Val Phe Gly Gly Glu Arg 165 170 Gly Ala Gln Pro Val Gln Asp Thr Lys Leu His Val Phe Asp Ala Asn 180 185 Thr Leu Thr Trp Ser Gln Pro Glu Thr Leu Gly Asn Pro Pro Ser Pro 200 Arg His Gly His Val Met Val Ala Ala Gly Thr Lys Leu Phe Ile His 215 Gly Gly Leu Ala Gly Asp Arg Phe Tyr Asp Asp Leu His Cys Ile Asp 230 235 Ile Ser Asp Met Lys Trp Gln Lys Leu Asn Pro Thr Gly Ala Ala Pro 245 250 Ala Gly Cys Ala Ser His Thr Pro Ala Val Ala Met Gly Lys His Val 260 265 Tyr Ile Phe Gly Gly Met Thr Pro Ala Gly Ala Pro Gly Thr Gln Cys 280 285 Thr Gln Tyr His Thr Glu Glu Gln His Trp Asp Pro Cys Leu Lys Phe 295 300 Asp Thr Pro Ser Tyr Pro Pro Gly Thr Ile Gly Thr His Ser His Val 310 315 Val Ser Phe Pro Trp Pro Val Thr Cys Ala Ser Glu Lys Glu Asp Ser 325 330 Asn Ser Leu Thr Leu Asn His Glu Ala Glu Lys Glu Asp Ser Ala Asp 340 345 Lys Val Met Ser His Ser Gly Asp Ser His Glu Glu Ser Gln Thr Ala 360 Thr Leu Leu Cys Leu Val Phe Gly Gly Met Asn Thr Glu Gly Glu Ile 375 380 Tyr Asp Asp Cys Ile Val Thr Val Val Asp 390

<210> 1272 <211> 176 <212>Amino acid <213> Homo sapiens

<400> 1272

Gly Phe Ser Ile Gly Lys Ala Thr Asp Arg Met Asp Ala Phe Arg Lys 10 Ala Lys Asn Arg Ala Val His His Leu His Tyr Ile Glu Arg Tyr Glu 25 Asp His Thr Ile Phe His Asp Ile Ser Leu Arg Phe Lys Arg Thr His 40 Ile Lys Met Lys Lys Gln Pro Lys Gly Tyr Gly Leu Arg Cys His Arg 55 Ala Ile Ile Thr Ile Cys Arg Leu Ile Gly Ile Lys Asp Met Tyr Ala 75 Lys Val Ser Gly Ser Ile Asn Met Leu Ser Leu Thr Gln Gly Leu Phe 90 Arg Gly Leu Ser Arg Gln Glu Thr His Gln Gln Leu Ala Asp Lys Lys 105 Gly Leu His Val Val Glu Ile Arg Glu Glu Cys Gly Pro Leu Pro Ile 120 125 Val Val Ala Ser Pro Arg Gly Pro Leu Arg Lys Asp Pro Glu Pro Glu 135 140 Asp Glu Val Pro Asp Val Lys Leu Asp Trp Glu Asp Val Lys Thr Ala 150

Gln Gly Met Lys Arg Ser Val Trp Ser 'Asn Leu Lys Arg Ala Ala Thr 165 170 175 176

<210> 1273 <211> 457 <212>Amino acid <213> Homo sapiens

<400> 1273

Ala Asp Pro His Thr Thr Val Ile Arg Phe Phe Pro Ala Ala Ser Ala 10 Thr Lys Arg Val Leu Pro Pro Val Leu Arg Val Ser Ser Pro Arg Thr 25 Trp Asn Pro Asn Val Pro Glu Ser Pro Arg Ile Pro Ala Pro Arg Leu Pro Lys Arg Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu 55 Cys Ala Ala Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln 70 Ser Lys Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala 90 His Gly Leu Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg 105 Thr Arg Ser Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly 120 Ser Ala Cys Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro 135 140 Glu Ser Arg Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu 150 155 Lys Ala Gln Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln 170 Gln Gln Arg His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln 185 Ser Gln Phe Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala 200 Lys Pro Ala Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp 215 Pro Ala His Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln 230 235 Glu Leu Phe Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln 250 Pro Gln Gly Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp 265 Gly Gly Trp Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe 275 280 Asn Arg Pro Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly 295 300 Glu Phe Trp Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg 315 Asn Ser Arg Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu 330 Leu Leu Gln Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser 340 345 Leu Gln Leu Thr Ala Pro Val Ala Gly Gln Leu Gly Ala Thr Thr Val 360 365 Pro Pro Ser Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His 375

<210> 1274 <211> 359 <212>Amino acid <213> Homo sapiens

<400> 1274 Thr Leu Arg Ser Arg Pro Ala Gly Glu Ala Gly Tyr Leu Gly Trp Asp 10 Pro Glu Gln Ala Gly Glu Gly Ser Ala Leu Ser Arg Pro Gly Ala Met Ala Ala Leu Met Thr Pro Gly Thr Gly Ala Pro Pro Ala Pro Gly Asp Phe Ser Gly Glu Gly Ser Gln Gly Leu Pro Asp Pro Ser Pro Glu Pro 55 Lys Gln Leu Pro Glu Leu Ile Arg Met Lys Arg Asp Gly Gly Arg Leu 70 Ser Glu Ala Asp Ile Arg Gly Phe Val Ala Ala Val Val Asn Gly Ser 8.5 90 Ala Gln Gly Ala Gln Ile Gly Ala Trp Gly Gly Leu Gly Val Pro Asp 105 Pro Asp Trp Glu Val Ser Pro Arg Asp Phe Gly Ser Leu Gly Val Arg 120 Arg Cys Pro Thr Thr Ser Thr Gly Pro Arg Val Pro His Arg Cys Gly 135 Leu Pro Pro Ser Arg Val Pro Pro His Thr Arg Gly Met Leu Met Ala 150 155 Ile Arg Leu Arg Gly Met Asp Leu Glu Glu Thr Ser Val Leu Thr Gln 170 Ala Leu Ala Gln Ser Gly Gln Gln Leu Glu Trp Pro Glu Ala Trp Arg 185 Gln Gln Leu Val Asp Lys His Ser Thr Gly Gly Val Gly Asp Lys Val 200 205 Ser Leu Val Leu Ala Pro Ala Leu Ala Ala Cys Gly Cys Lys Val Ile 215 220 Asn His Leu Leu Ser Arg Arg Glu Pro Ile Pro His Met Gln Gln Pro 230 235 Val His Pro Gln Ala Ala Pro Asn Leu Lys Pro Gly Pro Lys Pro Pro 250 Arg Pro Tyr Gln Gly Phe Ser Pro Pro Cys Ser Pro Ala Gln Phe Ser Pro Pro Arg Ser Pro Ala Gln Arg Leu Gly Pro Leu Trp Leu Gln Thr 280 285 Arg Pro Leu Gly Ala Gly Lys Arg Ser Thr Asp Gly Ile Gln Thr Pro 295 300 Phe Pro Leu Gly Pro Gln Thr Ala Pro Pro Arg Glu Glu Leu Arg Thr 310 315 Ser Leu Pro Leu Pro Gln Ala Leu Phe Pro Gln Gly Gln Val Pro Thr 325 330

Ser Ser Pro Thr Asp Thr Ser Gln Pro Arg Lys Leu Pro Phe His Ser 340 345 350

Leu Thr Ser Trp Ala Pro Leu 355 359

<210> 1275 <211> 146 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(146) <223> X = any amino acid or stop code

<400> 1275 Arg Ala Leu Arg Glu Leu Arg Glu Arg Val Thr His Gly Leu Ala Glu 10 Ala Gly Arg Asp Arg Glu Asp Val Ser Thr Glu Leu Tyr Arg Ala Leu 20 Glu Ala Val Arg Leu Gln Asn Ser Glu Gly Ser Cys Glu Pro Cys Pro Thr Ser Trp Leu Pro Phe Gly Gly Ser Cys Tyr Tyr Phe Ser Val Pro 55 Lys Thr Thr Trp Ala Glu Ala Gln Gly His Cys Ala Asp Ala Ser Ala 70 His Leu Ala Ile Val Gly Gly Leu Gly Glu Gln Asp Phe Leu Ser Arg 90 Asp Thr Ser Ala Leu Glu Tyr Trp Ile Gly Arg Arg Ala Val Gln His 105 Leu Arg Lys Val Gln Gly Tyr Ser Trp Val Asp Gly Val Pro Leu Ser 115 120 125 Phe Arg Xaa Trp Glu Gly His Pro Gly Glu Thr Trp Gly Pro Gln Val 135 Arg Leu 145 146

<210> 1276 <211> 187 <212>Amino acid <213> Homo sapiens

85 90 Gly Asn Ser Pro Ile Phe Tyr Arg Glu Val Leu Pro Leu Asn Gln Ala 105 His Arg Val Glu Val Cys Cys Phe Met Glu Arg Pro Leu Thr Leu Thr 120 Arg Gly Ser Ser Trp Ala His Cys Ser Tyr Cys His Arg Gly Ala Thr 135 140 Gly Pro Trp Pro Leu Thr Phe Gln Val Leu Gly Thr Arg His Leu Gln 150 155 Arg Arg Gln Ala Gln Arg Gln Gly Gln Arg Cys Trp Ser Gly Arg 165 170 Cys Gly Thr Trp Arg Tyr Arg Met Pro Cys Trp 185

<210> 1277 <211> 481 <212>Amino acid <213> Homo sapiens

<400> 1277 Gln Glu Asn Gln Leu Glu Lys Lys Met Lys Phe Leu Ile Phe Ala Phe 10 5 Phe Gly Gly Val His Leu Leu Ser Leu Cys Ser Gly Lys Ala Ile Cys 25 Lys Asn Gly Ile Ser Lys Arg Thr Phe Glu Glu Ile Lys Glu Glu Ile 40 Ala Ser Cys Gly Asp Val Ala Lys Ala Ile Ile Asn Leu Ala Val Tyr 55 Gly Lys Ala Gln Asn Arg Ser Tyr Glu Arg Leu Ala Leu Leu Val Asp 70 75 Thr Val Gly Pro Arg Leu Ser Gly Ser Lys Asn Leu Glu Lys Ala Ile 90 Gln Ile Met Tyr Gln Asn Leu Gln Gln Asp Gly Leu Glu Lys Val His 100 Leu Glu Pro Val Arg Ile Pro His Trp Glu Arg Gly Glu Glu Ser Ala 120 Val Met Leu Glu Pro Arg Ile His Lys Ile Ala Ile Leu Gly Leu Gly 135 Ser Ser Ile Gly Thr Pro Pro Glu Gly Ile Thr Ala Glu Val Leu Val 150 155 Val Thr Ser Phe Asp Glu Leu Gln Arg Arg Ala Ser Glu Ala Arg Gly 170 165 Lys Ile Val Val Tyr Asn Gln Pro Tyr Ile Asn Tyr Ser Arg Thr Val 185 190 Gln Tyr Arg Thr Gln Gly Ala Val Glu Ala Ala Lys Val Gly Ala Leu 200 Ala Ser Leu Ile Arg Ser Val Ala Ser Phe Ser Ile Tyr Ser Pro His 215 220 Thr Gly Ile Gln Glu Tyr Gln Asp Gly Val Pro Lys Ile Pro Thr Ala 230 235 Cys Ile Thr Val Glu Asp Ala Glu Met Met Ser Arg Met Ala Ser His 250 Gly Ile Lys Ile Val Ile Gln Leu Lys Met Gly Ala Lys Thr Tyr Pro 265 Asp Thr Asp Ser Phe Asn Thr Val Ala Glu Ile Thr Gly Ser Lys Tyr 275 280 Pro Glu Gln Val Val Leu Val Ser Gly His Leu Asp Ser Trp Asp Val 295 Gly Gln Gly Ala Met Asp Asp Gly Gly Gly Ala Phe Ile Ser Trp Glu

310 315 Ala Leu Ser Leu Ile Lys Asp Leu Gly Leu Arg Pro Lys Arg Thr Leu 325 330 Arg Leu Val Leu Trp Thr Ala Glu Glu Gln Gly Gly Val Gly Ala Phe 345 350 Gln Tyr Tyr Gln Leu His Lys Val Asn Ile Ser Asn Tyr Ser Leu Val 360 365 Met Glu Ser Asp Ala Gly Thr Phe Leu Pro Thr Gly Leu Gln Phe Thr 375 380 Gly Ser Glu Lys Ala Arg Ala Ile Met Glu Glu Val Met Ser Leu Leu 390 395 Gln Pro Leu Asn Ile Thr Gln Val Leu Ser His Gly Glu Gly Thr Asp 405 410 Ile Asn Phe Trp Ile Gln Ala Gly Val Pro Gly Ala Ser Leu Leu Asp 420 425 Asp Leu Tyr Lys Tyr Phe Phe Phe His His Ser His Gly Asp Thr Met 440 435 Thr Val His Gly Ile Gln Thr Gln Met Asn Val Ala Ala Ala Val Trp 455 460 Ala Val Val Ser Tyr Val Val Ala Asp Met Glu Glu Met Leu Pro Arq 470 475 Ser 481

<210> 1278 <211> 428 <212>Amino acid <213> Homo sapiens

<400> 1278

Thr Lys Pro Arg Lys Arg Arg His Gln Pro Ala Ser Gln Arg Gln Arg 10 Pro Trp Ser Ser Asp Ser Thr Gly Asp Leu Leu Ala Arg Gly Lys Gly 25 Arg Lys Glu Glu Asn Lys Gly Ser Asp Arg Val Ser Leu Ala Pro Pro 40 Ser Leu Arg Arg Pro Met Met Cys Gln Ser Glu Ala Arg Gln Gly Pro 55 Glu Leu Arg Ala Ala Lys Trp Leu His Phe Pro Gln Leu Ala Leu Arg 70 75 Arg Arg Leu Gly Gln Leu Ser Cys Met Ser Arg Pro Ala Leu Lys Leu 85 90 Arg Ser Trp Pro Leu Thr Val Leu Tyr Tyr Leu Leu Pro Phe Glý Ala 100 105 Leu Arg Pro Leu Ser Arg Val Gly Trp Arg Pro Val Ser Arg Val Ala 120 Leu Tyr Lys Ser Val Pro Thr Arg Leu Leu Ser Arg Ala Trp Gly Arg 135 Leu Asn Gln Val Glu Leu Pro His Trp Leu Arg Arg Pro Val Tyr Ser 150 155 Leu Tyr Ile Trp Thr Phe Gly Val Asn Met Lys Glu Ala Ala Val Glu 165 170 Asp Leu His His Tyr Arg Asn Leu Ser Glu Phe Phe Arg Arg Lys Leu 185 190 Lys Pro Gln Ala Arg Pro Val Cys Gly Leu His Ser Val Ile Ser Pro 200 205 Ser Asp Gly Arg Ile Leu Asn Phe Gly Gln Val Lys Asn Cys Glu Val 215 220 Glu Gln Val Lys Gly Val Thr Tyr Ser Leu Glu Ser Phe Leu Gly Pro

225 230 235 Arg Met Cys Thr Glu Asp Leu Pro Phe Pro Pro Ala Ala Ser Cys Asp 250 Ser Phe Lys Asn Gln Leu Val Thr Arg Glu Gly Asn Glu Leu Tyr His 265 Cys Val Ile Tyr Leu Ala Pro Gly Asp Tyr His Cys Phe His Ser Pro 280 285 Thr Asp Trp Thr Val Ser His Arg Arg His Phe Pro Gly Ser Leu Met 295 300 Ser Val Asn Pro Gly Met Ala Arg Trp Ile Lys Glu Leu Phe Cys His 310 315 Asn Glu Arg Val Val Leu Thr Gly Asp Trp Lys His Gly Phe Phe Ser 325 330 Leu Thr Ala Val Gly Ala Thr Asn Trp Gly Ser Ile Arg Ile Tyr Phe 345 Asp Arg Asp Leu His Thr Asn Ser Pro Arg His Ser Lys Gly Ser Tyr 360 Asn Asp Phe Ser Phe Val Thr His Thr Asn Arg Glu Gly Val Pro Met 375 Arg Lys Gly Glu His Leu Gly Glu Phe Asn Leu Gly Ser Thr Ile Val 390 395 Leu Ile Phe Glu Ala Pro Lys Asp Phe Asn Phe Gln Leu Lys Thr Gly 405 410 Gln Lys Ile Arg Phe Gly Glu Ala Leu Gly Ser Leu 425

<210> 1279 <211> 633 <212>Amino acid <213> Homo sapiens

<400> 1279 Leu Pro Glu Arg Ala Phe Gly Pro Arg Thr Pro Arg Ala Pro Arg Arg 10 Arg Arg Arg Leu Leu Leu Ser Pro Pro Pro Arg Pro Pro Pro Pro Leu Asp Arg Glu Pro Arg Ala Pro Gly Pro Trp Leu Cys Pro Ser Arg 40 Ala Gly Thr Ala Gln Asp Pro Ala Arg Ile Arg Glu Arg Arg Gly Arg 55 Val Ala Gly Gly Ala Ala Gly Pro Ala Met Glu Leu Arg Ala Arg Gly 75 Trp Trp Leu Leu Cys Ala Ala Ala Ala Leu Val Ala Cys Ala Arg Gly 90 Asp Pro Ala Ser Lys Ser Arg Ser Cys Gly Glu Val Arg Gln Ile Tyr 105 Gly Ala Lys Gly Phe Ser Ser Ser Asp Val Pro Gln Ala Glu Ile Ser 120 Gly Glu His Leu Arg Ile Cys Pro Gln Gly Tyr Thr Cys Cys Thr Ser 135 Glu Met Glu Glu Asn Leu Ala Asn Arg Ser His Ala Glu Leu Glu Thr 155 Ala Leu Arg Asp Ser Ser Arg Val Leu Gln Ala Met Leu Ala Thr Gln 170 Leu Arg Ser Phe Asp Asp His Phe Gln His Leu Leu Asn Asp Ser Glu 185 Arg Thr Leu Gln Ala Thr Phe Pro Gly Ala Phe Gly Glu Leu Tyr Thr 200 Gln Asn Ala Arg Ala Phe Arg Asp Leu Tyr Ser Glu Leu Arg Leu Tyr

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210
                        215
                                            220
Tyr Arg Gly Ala Asn Leu His Leu Glu Glu Thr Leu Ala Glu Phe Trp
                   230
                                        235
Ala Arg Leu Leu Glu Arg Leu Phe Lys Gln Leu His Pro Gln Leu Leu
        245
                                    250
Leu Pro Asp Asp Tyr Leu Asp Cys Leu Gly Lys Gln Ala Glu Ala Leu
            260
                               265
Arg Pro Phe Gly Glu Ala Pro Arg Glu Leu Arg Leu Arg Ala Thr Arg
                           280
Ala Phe Val Ala Ala Arg Ser Phe Val Gln Gly Leu Gly Val Ala Ser
                        295
Asp Val Val Arg Lys Val Ala Gln Val Pro Leu Gly Pro Glu Cys Ser
                    310
                                       315
Arg Ala Val Ile Glu Ala Gly Ser Tyr Cys Ala Leu His Cys Val Gly
                325
                                   330
Val Pro Gly Ala Arg Pro Cys Pro Asp Tyr Cys Arg Asn Val Leu Lys
            340
                               345
Gly Cys Leu Ala Asn Gln Ala Asp Leu Asp Ala Glu Trp Arg Asn Leu
                           360
Leu Asp Ser Met Val Leu Ile Thr Asp Lys Phe Trp Gly Thr Ser Gly
                       375
                                           380
Val Glu Ser Val Ile Gly Ser Val His Thr Trp Leu Ala Glu Ala Ile
                   390
                                       395
Asn Ala Leu Gln Asp Asn Arg Asp Thr Leu Thr Ala Lys Val Ile Gln
                405
                                   410
Gly Cys Gly Asn Pro Lys Val Asn Pro Gln Gly Pro Gly Pro Glu Glu
                               425
Lys Arg Arg Arg Gly Lys Leu Ala Pro Arg Glu Arg Pro Pro Ser Gly
                           440
Thr Leu Glu Lys Leu Val Ser Glu Ala Lys Ala Gln Leu Arg Asp Val
                        455
                                           460
Gln Asp Phe Trp Ile Ser Leu Pro Gly Thr Leu Cys Ser Glu Lys Met
                   470
                                        475
Ala Leu Ser Thr Ala Ser Asp Asp Arg Cys Trp Asn Gly Met Ala Arg
               485
                                   490
Gly Arg Tyr Leu Pro Glu Val Met Gly Asp Gly Leu Ala Asn Gln Ile
                               505
Asn Asn Pro Glu Val Glu Val Asp Ile Thr Lys Pro Asp Met Thr Ile
                           520
Arg Gln Gln Ile Met Gln Leu Lys Ile Met Thr Asn Arg Leu Arg Ser
                       535
                                           540
Ala Tyr Asn Gly Asn Asp Val Asp Phe Gln Asp Ala Ser Asp Asp Gly
                                      555
Ser Gly Ser Gly Ser Gly Asp Gly Cys Leu Asp Asp Leu Cys Gly Arg
                                  570
Lys Val Ser Arg Lys Ser Ser Ser Ser Arg Thr Pro Leu Thr His Ala
                              585
Leu Pro Gly Leu Ser Glu Gln Glu Gly Gln Lys Thr Ser Ala Ala Ser
                          600
Cys Pro Gln Pro Pro Thr Phe Leu Leu Pro Leu Leu Leu Phe Leu Ala
                       615
Leu Thr Val Ala Arg Pro Arg Trp Arg
                   630
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<210> 1280 <211> 133 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(133) <223> X = any amino acid or stop code

<400> 1280 Ala Thr Glu Leu Thr Arg Ala Gly Met Glu Ala Ser Ala Leu Thr Lys 10 Ser Ala Val Thr Ser Val Ala Lys Val Val Arg Val Ala Ser Gly Ser 25 Ala Val Val Leu Pro Leu Ala Arg Ile Ala Thr Ser Cys Asp Xaa Arg 40 Val Gly Gly Pro Val Gln Ala Val Pro Met Val Leu Ser Ala Met Gly 55 Leu Gln Leu Arg Ala Gly Ile Ala Ser Ser Ser Ile Ala Ala Lys Met 75 Met Ser Ala Ala Ile Ala Asn Gly Gly Gly Val Ser Pro Gly Gln 90 Pro Leu Trp Leu Leu Gln Ser Leu Gly Ala Thr Gly Leu Ser Gly 105 Leu Thr Lys Phe Ile Leu Gly Ser Ile Gly Ser Ala Ile Ala Ala Val 115 Ile Ala Arg Phe Tyr 133

<210> 1281 <211> 457 <212>Amino acid <213> Homo sapiens

<400> 1281 Thr Asn Gly Arg Asn Leu Leu His His Trp Ile Leu Gly Val Cys Gly 5 10 Met His Pro His His Gln Glu Thr Leu Lys Lys Asn Arg Val Val Leu 25 Ala Lys Gln Leu Leu Ser Glu Leu Leu Glu His Leu Leu Glu Lys 40 Asp Ile Ile Thr Leu Glu Met Arg Glu Leu Ile Gln Ala Lys Val Gly 55 Ser Phe Ser Gln Asn Val Glu Leu Leu Asn Leu Leu Pro Lys Arg Gly 70 Pro Gln Ala Phe Asp Ala Phe Cys Glu Ala Leu Arg Glu Thr Lys Gln 85 90 Gly His Leu Glu Asp Met Leu Leu Thr Thr Leu Ser Gly Leu Gln His 105 Val Leu Pro Pro Leu Ser Cys Asp Tyr Asp Leu Ser Leu Pro Phe Pro 120 Val Cys Glu Ser Cys Pro Leu Tyr Lys Lys Leu Arg Leu Ser Thr Asp 135 140 Thr Val Glu His Ser Leu Asp Asn Lys Asp Gly Pro Val Cys Leu Gln 150 155 Val Lys Pro Cys Thr Pro Glu Phe Tyr Gln Thr His Phe Gln Leu Ala 170 Tyr Arg Leu Gln Ser Arg Pro Arg Gly Leu Ala Leu Val Leu Ser Asn 185 Val His Phe Thr Gly Glu Lys Glu Leu Glu Phe Arg Ser Gly Gly Asp 200 Val Asp His Ser Thr Leu Val Thr Leu Phe Lys Leu Leu Gly Tyr Asp 220

Val His Val Leu Cys Asp Gln Thr Ala Gln Glu Met Gln Glu Lys Leu 230 235 Gln Asn Phe Ala Gln Leu Pro Ala His Arg Val Thr Asp Ser Cys Ile 245 250 Val Ala Leu Leu Ser His Gly Val Glu Gly Ala Ile Tyr Gly Val Asp 265 Gly Lys Leu Leu Gln Leu Gln Glu Val Phe Gln Leu Phe Asp Asn Ala 275 280 Asn Cys Pro Ser Leu Gln Asn Lys Pro Lys Met Phe Phe Ile Gln Ala 295 Cys Arg Gly Gly Ala Ile Gly Ser Leu Gly His Leu Leu Phe Thr 310 315 Ala Ala Thr Ala Ser Leu Ala Leu Glu Thr Asp Arg Gly Val Asp Gln 325 330 Gln Asp Gly Lys Asn His Ala Gly Ser Pro Gly Cys Glu Glu Ser Asp 345 Ala Gly Lys Glu Lys Leu Pro Lys Met Arg Leu Pro Thr Arg Ser Asp 360 Met Ile Cys Gly Tyr Ala Cys Leu Lys Gly Thr Ala Ala Met Arg Asn 375 380 Thr Lys Arg Gly Ser Trp Tyr Ile Glu Ala Leu Ala Gln Val Phe Ser 390 395 Glu Arg Ala Cys Asp Met His Val Ala Asp Met Leu Val Lys Val Asn 405 410 Ala Leu Ile Lys Asp Arg Glu Gly Tyr Ala Pro Gly Thr Glu Phe His 420 425 Arg Cys Lys Glu Met Ser Glu Tyr Cys Ser Thr Leu Cys Arg His Leu 440 Tyr Leu Phe Pro Gly His Pro Pro Thr 455

<210> 1282 <211> 195 <212>Amino acid <213> Homo sapiens

<400> 1282

Val Arg Gly Lys Glu Val Met Ala Ala Leu Cys Arg Thr Arg Ala Val Ala Ala Glu Ser His Phe Leu Arg Val Phe Leu Phe Phe Arg Pro Phe 25 Arg Gly Val Gly Thr Glu Ser Gly Ser Glu Ser Gly Ser Ser Asn Ala 40 Lys Glu Pro Lys Thr Arg Ala Gly Gly Phe Ala Ser Ala Leu Glu Arg 55 His Ser Glu Leu Leu Gln Lys Val Glu Pro Leu Gln Lys Gly Ser Pro 70 Lys Asn Val Glu Ser Phe Ala Ser Met Leu Arg His Ser Pro Leu Thr 90 Gln Met Gly Pro Ala Lys Asp Lys Leu Val Ile Gly Arg Ile Phe His 105 Ile Val Glu Asn Asp Leu Tyr Ile Asp Phe Gly Gly Lys Phe His Cys 120 Val Cys Arg Arg Pro Glu Val Asp Gly Glu Lys Tyr Gln Lys Gly Thr 135 Arg Val Arg Leu Arg Leu Leu Asp Leu Glu Leu Thr Ser Arg Phe Leu 155 Gly Ala Thr Thr Asp Thr Thr Val Leu Glu Ala Asn Ala Val Leu Leu 165 170

Gly Ile Gln Glu Ser Lys Asp Ser Arg Ser Lys Glu Glu His Leu Glu
180 185 190

Lys Tyr Ile 195

> <210> 1283 <211> 1499 <212>Amino acid <213> Homo sapiens

<400> 1283 Ile Pro Gly Ala Ser Pro Ala Pro Arg Arg Ala Pro Leu Arg Leu Gly Leu Arg Leu Ala Ser Gly Trp Ala Arg Ala Pro Gly Gly Val Ser Pro Val Pro Gly Pro Gly Met Gly Gly Asp Ala Pro Thr Met Ala Arg 40 Ala Gln Ala Leu Val Leu Glu Leu Thr Phe Gln Leu Cys Ala Pro Glu 55 Thr Glu Thr Pro Glu Val Gly Cys Thr Phe Glu Glu Gly Ser Asp Pro 70 75 Ala Val Pro Cys Glu Tyr Ser Gln Ala Gln Tyr Asp Asp Phe Gln Trp 90 Glu Gln Val Arg Ile His Pro Gly Thr Arg Ala Pro Ala Asp Leu Pro 105 His Gly Ser Tyr Leu Met Val Asn Thr Ser Gln His Ala Pro Gly Gln 120 Arg Ala His Val Ile Phe Gln Ser Leu Ser Glu Asn Asp Thr His Cys 140 Val Gln Phe Ser Tyr Phe Leu Tyr Ser Arg Asp Gly His Ser Pro Gly . 150 155 Thr Leu Gly Val Tyr Val Arg Val Asn Gly Gly Pro Leu Gly Ser Ala 165 170 Val Trp Asn Met Thr Gly Ser His Gly Arg Gln Trp His Gln Ala Glu 180 185 Leu Ala Val Ser Thr Phe Trp Pro Asn Glu Tyr Gln Val Leu Phe Glu 200 Ala Leu Ile Ser Pro Asp Arg Arg Gly Tyr Met Gly Leu Asp Asp Ile 215 220 Leu Leu Ser Tyr Pro Cys Ala Lys Ala Pro His Phe Ser Arg Leu 235 Gly Asp Val Glu Val Asn Ala Gly Gln Asn Ala Ser Phe Gln Cys Met 250 Ala Ala Gly Arg Ala Ala Glu Ala Glu Arg Phe Leu Leu Gln Arg Gln 265 Ser Gly Ala Leu Val Pro Ala Ala Gly Val Arg His Ile Ser His Arg Arg Phe Leu Ala Thr Phe Pro Leu Ala Ala Val Ser Arg Ala Glu Gln 295 300 Asp Leu Tyr Arg Cys Val Ser Gln Ala Pro Arg Gly Arg Gly Thr Ser 310 315 Leu Asn Phe Ala Glu Phe Met Val Lys Glu Pro Pro Thr Pro Ile Ala 325 330 Pro Pro Gln Leu Leu Arg Ala Gly Pro Thr Tyr Leu Ile Ile Gln Leu 345 Asn Thr Asn Ser Ile Ile Gly Asp Gly Pro Ile Val Arg Lys Glu Ile 360 Glu Tyr Arg Met Ala Arg Gly Pro Trp Ala Glu Val His Ala Val Ser 375 380

Leu Gln Thr Tyr Lys Leu Trp His Leu Asp Pro Asp Thr Glu Tyr Glu 390 395 Ile Ser Val Leu Leu Thr Arg Pro Gly Asp Gly Gly Thr Gly Arg Pro 410 Gly Pro Pro Leu Ile Ser Arg Thr Lys Cys Ala Glu Pro Met Arg Ala 425 Pro Lys Gly Leu Ala Phe Ala Glu Ile Gln Ala Arg Gln Leu Thr Leu 440 Gln Trp Glu Pro Leu Gly Tyr Asn Val Thr Arg Cys His Thr Tyr Thr 455 Val Ser Leu Cys Tyr His Tyr Thr Leu Gly Ser Ser His Asn Gln Thr 470 475 Ile Arg Glu Cys Val Lys Thr Glu Gln Gly Val Ser Arg Tyr Thr Met 490 Lys Asn Leu Leu Pro Tyr Arg Asn Val His Val Arg Leu Val Leu Thr 505 Asn Pro Glu Gly Arg Lys Glu Gly Lys Glu Val Thr Phe Gln Thr Asp 520 Glu Asp Val Pro Ser Gly Ile Ala Ala Glu Ser Leu Thr Phe Thr Pro 535 Leu Glu Asp Met Ile Phe Leu Lys Trp Glu Glu Pro Gln Glu Pro Asn 550 555 Gly Leu Ile Thr Gln Tyr Glu Ile Ser Tyr Gln Ser Ile Glu Ser Ser 565 570 Asp Pro Ala Val Asn Val Pro Gly Pro Arg Arg Thr Ile Ser Lys Leu 580 585 Arg Asn Glu Thr Tyr His Val Phe Ser Asn Leu His Pro Gly Thr Thr 600 605 Tyr Leu Phe Ser Val Arg Ala Arg Thr Gly Lys Gly Phe Gly Gln Ala 615 620 Ala Leu Thr Glu Ile Thr Thr Asn Ile Ser Ala Pro Ser Phe Asp Tyr 630 635 Ala Asp Met Pro Ser Pro Leu Gly Glu Ser Glu Asn Thr Ile Thr Val 650 Leu Leu Arg Pro Ala Gln Gly Arg Gly Ala Pro Ile Ser Val Tyr Gln 665 Val Ile Val Glu Glu Glu Gly Ser Arg Arg Leu Arg Arg Glu Pro 680 Gly Gly Gln Asp Cys Phe Pro Val Pro Leu Thr Phe Glu Ala Ala Leu 695 Ala Arg Gly Leu Val Asp Tyr Phe Gly Ala Glu Leu Ala Ala Ser Ser 710 715 Leu Pro Glu Ala Met Pro Phe Thr Val Gly Asp Asn Lys Thr Tyr Arg 725 730 Gly Phe Trp Asn Pro Pro Leu Glu Pro Arg Lys Ala Tyr Leu Ile Tyr 745 Phe Gln Ala Ala Ser His Leu Lys Gly Glu Thr Arg Leu Asn Cys Ile 760 Arg Ile Ala Arg Lys Ala Ala Cys Lys Glu Ser Lys Arg Pro Leu Glu 775 780 Val Ser Gln Arg Ser Glu Glu Met Gly Leu Ile Leu Gly Ile Cys Ala 790 795 Gly Gly Leu Ala Val Leu Ile Leu Leu Leu Gly Ala Ile Ile Val Ile 805 810 Ile Arg Lys Gly Arg Asp His Tyr Ala Tyr Ser Tyr Tyr Pro Lys Pro 820 825 Val Asn Met Thr Lys Ala Thr Val Asn Tyr Arg Gln Glu Lys Thr His 840 Met Met Ser Ala Val Asp Arg Ser Phe Thr Asp Gln Ser Thr Leu Gln 855 860 Glu Asp Glu Arg Leu Gly Leu Ser Phe Met Asp Thr His Gly Tyr Ser 870 875 Thr Arg Gly Asp Gln Arg Ser Gly Gly Val Thr Glu Ala Ser Ser Leu 890

Leu Gly Gly Ser Pro Arg Arg Pro Cys Gly Arg Lys Gly Ser Pro Tyr 905 His Thr Gly Gln Leu His Pro Ala Val Arg Val Ala Asp Leu Leu Gln 920 925 His Ile Asn Gln Met Lys Thr Ala Glu Gly Tyr Gly Phe Lys Gln Glu 935 940 Tyr Glu Ser Phe Phe Glu Gly Trp Asp Ala Thr Lys Lys Lys Asp Lys 955 950 Val Lys Gly Ser Arg Gln Glu Pro Met Pro Ala Tyr Asp Arg His Arg 965 970 Val Lys Leu His Pro Met Leu Gly Asp Pro Asn Ala Asp Tyr Ile Asn 980 985 990 Ala Asn Tyr Ile Asp Ile Arg Ile Asn Arg Glu Gly Tyr His Arg Ser 1000 1005 Asn His Phe Ile Ala Thr Gln Gly Pro Lys Pro Glu Met Val Tyr Asp 1010 1015 1020 Phe Trp Arg Met Val Trp Gln Glu His Cys Ser Ser Ile Val Met Ile 1035 1025 1030 Thr Lys Leu Val Glu Val Gly Arg Val Lys Cys Ser Arg Tyr Trp Pro 1045 1050 Glu Asp Ser Asp Thr Tyr Gly Asp Ile Lys Ile Met Leu Val Lys Thr 1060 1065 1070 Glu Thr Leu Ala Glu Tyr Val Val Arg Thr Phe Ala Leu Glu Arg Arg 1075 1080 1085 Gly Tyr Ser Ala Arg His Glu Val Arg Gln Phe His Phe Thr Ala Trp 1090 1095 1100 Pro Glu His Gly Val Pro Tyr His Ala Thr Gly Leu Leu Ala Phe Ile 1115 1110 Arg Arg Val Lys Ala Ser Thr Pro Pro Asp Ala Gly Pro Ile Val Ile 1125 1130 1135 His Cys Ser Ala Gly Thr Gly Arg Thr Gly Cys Tyr Ile Val Leu Asp 1140 1145 Val Met Leu Asp Met Ala Glu Cys Glu Gly Val Val Asp Ile Tyr Asn 1155 1160 1165 Cys Val Lys Thr Leu Cys Ser Arg Arg Val Asn Met Ile Gln Thr Glu 1170 1175 1180 Glu Gln Tyr Ile Phe Ile His Asp Ala Ile Leu Glu Ala Cys Leu Cys 1190 1195 Gly Glu Thr Thr Ile Pro Val Ser Glu Phe Lys Ala Thr Tyr Lys Glu 1205 1210 1215 Met Ile Arg Ile Asp Pro Gln Ser Asn Ser Ser Gln Leu Arg Glu Glu 1220 1225 1230 Phe Gln Thr Leu Asn Ser Val Thr Pro Pro Leu Asp Val Glu Glu Cys 1235 1240 1245 Ser Ile Ala Leu Leu Pro Arg Asn Arg Asp Lys Asn Arg Ser Met Asp 1250 1255 1260 Val Leu Pro Pro Asp Arg Cys Leu Pro Phe Leu Ile Ser Thr Asp Gly 1270 1275 Asp Ser Asn Asn Tyr Ile Asn Ala Ala Leu Thr Asp Ser Tyr Thr Arg 1285 1290 1295 Ser Ala Ala Phe Ile Val Thr Leu His Pro Leu Gln Ser Thr Thr Pro 1300 1305 1310 Asp Phe Trp Gly Leu Val Tyr Asp Tyr Gly Cys Thr Ser Ile Val Met 1315 1320 1325 Leu Asn Gln Leu Asn Gln Ser Asn Ser Ala Trp Pro Cys Leu Gln Tyr 1335 1340 Trp Pro Glu Pro Gly Arg Gln Gln Tyr Gly Leu Met Glu Val Glu Phe 1350 1355 Met Ser Gly Thr Ala Asp Glu Asp Leu Val Ala Arg Val Phe Arg Val 1370 1375 Gln Asn Ile Ser Arg Leu Gln Glu Gly His Leu Leu Val Arg His Phe 1380 1385 1390 Gln Phe Leu Arg Trp Ser Ala Tyr Arg Asp Thr Pro Asp Ser Lys Lys 1400

Ala Phe Leu His Leu Leu Ala Glu Gly Asp Lys Trp Gln Ala Glu Ser 1415 1420 Gly Asp Gly Arg Thr Ile Val His Cys Leu Asn Gly Gly Gly Arg Ser 1430 1435 Gly Thr Phe Cys Ala Cys Ala Thr Val Leu Glu Met Ile Arg Cys His 1445 1450 1455 Asn Leu Val Asp Val Phe Phe Ala Ala Lys Thr Leu Arg Asn Tyr Lys 1460 1465 1470 Pro Asn Met Val Glu Thr Met Asp Gln Tyr His Phe Cys Tyr Asp Val 1475 1480 Ala Leu Glu Tyr Leu Glu Gly Leu Glu Ser Arg 1490 1495

<210> 1284 <211> 430 <212>Amino acid <213> Homo sapiens

<400> 1284

Thr Lys Pro Arg Lys Arg Arg His Gln Pro Ala Ser Gln Arg Gln Arg 10 Pro Trp Ser Ser Asp Ser Thr Gly Asp Leu Leu Ala Arg Gly Lys Gly 20 25 Arg Lys Glu Glu Asn Lys Gly Ser Asp Arg Val Ser Leu Ala Pro Pro 40 Ser Leu Arg Arg Pro Met Met Cys Gln Ser Glu Ala Arg Gln Gly Pro 55 60 Glu Leu Arg Ala Ala Lys Trp Leu His Phe Pro Gln Leu Ala Leu Arg 70 75 Arg Arg Leu Gly Gln Leu Ser Cys Met Ser Arg Pro Ala Leu Lys Leu 85 90 Arg Ser Trp Pro Leu Thr Val Leu Tyr Tyr Leu Leu Pro Phe Gly Ala 105 Leu Arg Pro Leu Ser Arg Val Gly Trp Arg Pro Val Ser Arg Val Ala 120 Leu Tyr Lys Ser Val Pro Thr Arg Leu Leu Ser Arg Ala Trp Gly Arg 135 140 Leu Asn Gln Val Glu Leu Pro His Trp Leu Arg Arg Pro Val Tyr Ser 150 155 Leu Tyr Ile Trp Thr Phe Gly Val Asn Met Lys Glu Ala Ala Val Glu 165 170 Asp Leu His His Tyr Arg Asn Leu Ser Glu Phe Phe Arg Arg Lys Leu 180 185 190 Lys Pro Gln Ala Arg Pro Val Cys Gly Leu His Ser Val Ile Ser Pro 200 205 Ser Asp Gly Arg Ile Leu Asn Phe Gly Gln Val Lys Asn Cys Glu Val 215 220 Glu Gln Val Lys Gly Val Thr Tyr Ser Leu Glu Ser Phe Leu Gly Pro 230 235 Arg Met Cys Thr Glu Asp Leu Pro Phe Pro Pro Ala Ala Ser Cys Asp 250 Ser Phe Lys Asn Gln Leu Val Thr Arg Glu Gly Asn Glu Leu Tyr His 265 Cys Val Ile Tyr Leu Ala Pro Gly Asp Tyr His Cys Phe His Ser Pro 280 285 Thr Asp Trp Thr Val Ser His Arg Arg His Phe Pro Gly Ser Leu Met 295 300 Ser Val Asn Pro Gly Met Ala Arg Trp Ile Lys Glu Leu Phe Cys His 315

Asn Glu Arg Val Val Leu Thr Gly Asp Trp Lys His Gly Phe Phe Ser 325 Leu Thr Ala Val Gly Ala Thr Asn Trp Gly Ser Ile Arg Ile Tyr Phe 340 345 Asp Arg Asp Leu His Thr Asn Ser Pro Arg His Ser Lys Gly Ser Tyr 360 Asn Asp Phe Ser Phe Val Thr His Thr Asn Arg Glu Gly Val Pro Met 375 Ala Leu Arg Gly Glu His Leu Gly Gln Ser Phe Asn Leu Gly Ser Thr 390 395 Ile Val Leu Ile Phe Glu Ala Pro Lys Asp Phe Asn Phe Gln Leu Lys 405 410 Thr Gly Gln Lys Ile Arg Phe Gly Glu Ala Leu Gly Ser Leu 425

<210> 1285 <211> 957 <212>Amino acid <213> Homo sapiens

<400> 1285 Ala Glu Leu Gly Leu Phe Gly Ser Leu Arg Phe Ser Ser Leu Leu His Phe Pro Pro Arg Pro Arg Ser Pro Ala Ser Ala Cys Gly Pro Gly Glu 20 25 Gly Arg Met Glu Arg Gly Leu Pro Leu Leu Cys Ala Val Leu Ala Leu 40 Val Leu Ala Pro Ala Gly Ala Phe Arg Asn Asp Lys Cys Gly Asp Thr 55 60 Ile Lys Ile Glu Ser Pro Gly Tyr Leu Thr Ser Pro Gly Tyr Pro His 75 Ser Tyr His Pro Ser Glu Lys Cys Glu Trp Leu Ile Gln Ala Pro Asp 90 Pro Tyr Gln Arg Ile Met Ile Asn Phe Asn Pro His Phe Asp Leu Glu 105 Asp Arg Asp Cys Lys Tyr Asp Tyr Val Glu Val Phe Asp Gly Glu Asn 120 125 Glu Asn Gly His Phe Arg Gly Lys Phe Cys Gly Lys Ile Ala Pro Pro 135 Pro Val Val Ser Ser Gly Pro Phe Leu Phe Ile Lys Phe Val Ser Asp 150 Tyr Glu Thr His Gly Ala Gly Phe Ser Ile Arg Tyr Glu Ile Phe Lys 165 170 Arg Gly Pro Glu Cys Ser Gln Asn Tyr Thr Thr Pro Ser Gly Val Ile 185 Lys Ser Pro Gly Phe Pro Glu Lys Tyr Pro Asn Ser Leu Glu Cys Thr 200 Tyr Ile Val Phe Ala Pro Lys Met Ser Glu Ile Ile Leu Asp Phe Glu 215 Ser Phe Asp Leu Glu Pro Asp Ser Asn Pro Pro Gly Gly Met Phe Cys 230 235 Arg Tyr Asp Arg Leu Glu Ile Trp Asp Gly Phe Pro Asp Val Gly Pro 250 His Ile Gly Arg Tyr Cys Gly Gln Lys Thr Pro Gly Arg Ile Arg Ser 265 Ser Ser Gly Ile Leu Ser Met Val Phe Tyr Thr Asp Ser Ala Ile Ala 280 Lys Glu Gly Phe Ser Ala Asn Tyr Ser Val Leu Gln Ser Ser Val Ser 300

Glu Asp Phe Lys Cys Met Glu Ala Leu Gly Met Glu Ser Gly Glu Ile 310 315 His Ser Asp Gln Ile Thr Ala Ser Ser Gln Tyr Ser Thr Asn Trp Ser 325 330 Ala Glu Arg Ser Arg Leu Asn Tyr Pro Glu Asn Gly Trp Thr Pro Gly 345 Glu Asp Ser Tyr Arg Glu Trp Ile Gln Val Asp Leu Gly Leu Leu Arg 360 Phe Val Thr Ala Val Gly Thr Gln Gly Ala Ile Ser Lys Glu Thr Lys 375 Lys Lys Tyr Tyr Val Lys Thr Tyr Lys Ile Asp Val Ser Ser Asn Gly 390 395 Glu Asp Trp Ile Thr Ile Lys Glu Gly Asn Lys Pro Val Leu Phe Gln 405 410 Gly Asn Thr Asn Pro Thr Asp Val Val Val Ala Val Phe Pro Lys Pro 420 425 Leu Ile Thr Arg Phe Val Arg Ile Lys Pro Ala Thr Trp Glu Thr Gly 440 Ile Ser Met Arg Phe Glu Val Tyr Gly Cys Lys Ile Thr Asp Tyr Pro 455 Cys Ser Gly Met Leu Gly Met Val Ser Gly Leu Ile Ser Asp Ser Gln 470 475 Ile Thr Ser Ser Asn Gln Gly Asp Arg Asn Trp Met Pro Glu Asn Ile 485 490 Arg Leu Val Thr Ser Arg Ser Gly Trp Ala Leu Pro Pro Ala Pro His 505 Ser Tyr Ile Asn Glu Trp Leu Gln Ile Asp Leu Gly Glu Glu Lys Ile 520 525 Val Arg Gly Ile Ile Ile Gln Gly Gly Lys His Arg Glu Asn Lys Val 535 Phe Met Arg Lys Phe Lys Ile Gly Tyr Ser Asn Asn Gly Ser Asp Trp 550 555 Lys Met Ile Met Asp Asp Ser Lys Arg Lys Ala Lys Ser Phe Glu Gly 565 570 Asn Asn Asn Tyr Asp Thr Pro Glu Leu Arg Thr Phe Pro Ala Leu Ser 585 Thr Arg Phe Ile Arg Ile Tyr Pro Glu Arg Ala Thr His Gly Gly Leu 600 Gly Leu Arg Met Glu Leu Leu Gly Cys Glu Val Glu Ala Pro Thr Ala 615 Gly Pro Thr Thr Pro Asn Gly Asn Leu Val Asp Glu Cys Asp Asp Asp 630 635 Gln Ala Asn Cys His Ser Gly Thr Gly Asp Asp Phe Gln Leu Thr Gly 645 650 Gly Thr Thr Val Leu Ala Thr Glu Lys Pro Thr Val Ile Asp Ser Thr 660 665 Ile Gln Ser Glu Phe Pro Thr Tyr Gly Phe Asn Cys Glu Phe Gly Trp 680 Gly Ser His Lys Thr Phe Cys His Trp Glu His Asp Asn His Val Gln 695 Leu Lys Trp Ser Val Leu Thr Ser Lys Thr Gly Pro Ile Gln Asp His 710 715 Thr Gly Asp Gly Asn Phe Ile Tyr Ser Gln Ala Asp Glu Asn Gln Lys 725 730 Gly Lys Val Ala Arg Leu Val Ser Pro Val Val Tyr Ser Gln Asn Ser 745 Ala His Cys Met Thr Phe Trp Tyr His Met Ser Gly Ser His Val Gly 760 Thr Leu Arg Val Lys Leu Arg Tyr Gln Lys Pro Glu Glu Tyr Asp Gln 775 Leu Val Trp Met Ala Ile Gly His Gln Gly Asp His Trp Lys Glu Gly 790 795 Arg Val Leu Leu His Lys Ser Leu Lys Leu Tyr Gln Val Ile Phe Glu 810

Gly Glu Ile Gly Lys Gly Asn Leu Gly Gly Ile Ala Val Asp Asp Ile 825 Ser Ile Asn Asn His Ile Ser Gln Glu Asp Cys Ala Lys Pro Ala Asp 840 Leu Asp Lys Lys Asn Pro Glu Ile Lys Ile Asp Glu Thr Gly Ser Thr 855 860 Pro Gly Tyr Glu Gly Glu Gly Glu Gly Asp Lys Asn Ile Ser Arg Lys 870 875 Pro Gly Asn Val Leu Lys Thr Leu Glu Pro Ile Leu Ile Thr Ile Ile 885 890 Ala Met Ser Ala Leu Gly Val Leu Leu Gly Ala Val Cys Gly Val Val 905 Leu Tyr Cys Ala Cys Trp His Asn Gly Met Ser Glu Arg Asn Leu Ser 920 Ala Leu Glu Asn Tyr Asn Phe Glu Leu Val Asp Gly Val Lys Leu Lys 935 Lys Asp Lys Leu Asn Thr Gln Ser Thr Tyr Ser Glu Ala 950 955

<210> 1286
<211> 173
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(173)
<223> X = any amino acid or stop code

<400> 1286 His Glu Gly Ser Ala Leu Thr Trp Ala Ser His Tyr Gln Glu Arg Leu 10 Asn Ser Glu Gln Ser Cys Leu Asn Glu Trp Thr Ala Met Ala Asp Leu 25 . Glu Ser Leu Arg Pro Pro Ser Ala Glu Pro Gly Gly Ser Val Cys Gly 40 Gly Glu Gly Leu Gly Gly Glu Gly Arg Ile Met Gln Trp Gly Ala Trp Trp Arg Gly Glu Arg Ala Pro Xaa Leu Arg Gly Ser Ala Pro Arg 75 Ser Ser Glu Gln Glu Gln Met Glu Gln Ala Ile Arg Ala Glu Leu Trp Lys Val Leu Asp Val Ser Asp Leu Glu Ser Val Thr Ser Lys Glu Ile 105 Arg Gln Ala Leu Glu Leu Arg Leu Gly Leu Pro Leu Gln Pro Val Pro 120 Xaa Leu His Arg Gln Pro Asp Ala Ala Ala Gly Gly Thr Ala Gly Pro 135 140 Ser Leu Pro His Leu Pro Pro Pro Leu Pro Gly Leu Arg Val Glu Arg 150 155 Ser Lys Pro Gly Gly Ala Ala Glu Glu Gln Val Gly Leu 165

<210> 1287 <211> 181 <212>Amino acid <213> Homo sapiens

<400> 1287 Met Ala Ala Leu Asp Leu Arg Ala Glu Leu Asp Ser Leu Val Leu Gln Leu Leu Gly Asp Leu Glu Glu Leu Glu Gly Lys Arg Thr Val Leu Asn Ala Arg Val Glu Glu Gly Trp Leu Ser Leu Ala Lys Ala Arg Tyr Ala Met Gly Ala Lys Ser Val Gly Pro Leu Gln Tyr Ala Ser His Met Glu 55 Pro Gln Val Cys Leu His Ala Ser Glu Ala Gln Glu Gly Leu Gln Lys 70 Phe Lys Val Val Arg Ala Gly Val His Ala Pro Glu Glu Val Gly Pro 8.5 90 Arg Glu Ala Gly Leu Arg Arg Arg Lys Gly Pro Thr Lys Thr Pro Glu 105 Pro Glu Ser Ser Glu Ala Pro Gln Asp Pro Leu Asn Trp Phe Gly Ile 120 Leu Val Pro His Ser Leu Arg Gln Ala Gln Ala Ser Phe Arg Asp Gly 135 140 Leu Gln Leu Ala Ala Asp Ile Ala Ser Leu Gln Asn Arg Ile Asp Trp 150 155 Gly Arg Ser Gln Leu Arg Gly Leu Gln Glu Lys Leu Lys Gln Leu Glu 170 Pro Gly Ala Ala * 180

<210> 1288 <211> 216 <212>Amino acid <213> Homo sapiens

<400> 1288 His Ser Asp Val Gly Ala Ala Thr Ala Val Leu Pro Leu Leu Thr Ala 10 Val Leu Gly Val Thr Val Val Thr Arg Arg Asp Thr Glu Gly Pro Gly 25 Arg Ala Ala Leu Val His Leu Thr Gly Ser Pro Arg Gln Lys Val Gly Thr Ser Gly Arg Glu Gly Leu Pro Gly Leu Gly Ala Ser Cys Ala Glu 55 Ser Glu Leu Glu Arg Glu Thr Gln Glu Pro Arg Ser Arg Gly Arg Cys Ile Phe Gly Ala Ala Arg Trp Arg Gln Val Pro Leu Ala Ser Pro Gln 90 Arg Pro Phe Leu Leu Ser Pro Gly Pro Arg Leu His Arg Met Gly Leu 105 Pro Val Ser Trp Ala Pro Pro Ala Leu Trp Val Leu Gly Cys Cys Ala 120 Leu Leu Ser Leu Trp Ala Leu Cys Thr Ala Cys Arg Arg Pro Glu 135 Asp Ala Val Ala Pro Arg Lys Arg Ala Arg Arg Gln Arg Ala Arg Leu 150 155 Gln Gly Ser Ala Thr Ala Ala Glu Ala Val Ser Ala Lys Leu Ser Arg 170 Gly Pro Gly Trp Gly Pro Gln Gly Thr Asp Gln Pro Ser Ser Pro Pro

Val Pro Thr Glu Ala Asp Pro Pro Leu Leu Pro Gln Gln Val Gly His
195 200 205

Gln Thr Ala Arg Ala Ala Pro Gly
210 215 216

<210> 1289
<211> 148
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(148)
<223> X = any amino acid or stop code

<400> 1289 Leu Thr Gly Pro Gly Gln Arg Leu Ala Gly Thr Thr Glu Gly Pro Arg 10 Arg Cys Arg Gly Ser Ser Gln Ala Pro Thr Pro Thr Trp Lys Leu Val 20 Asp Thr Arg Leu Cys Ala Ala Ala Pro Trp Leu Ala Ser Arg Ala Pro 40 Gly His Tyr Ser Gln Met Leu Leu Val Asn Xaa Pro Cys Arg Lys Asp 55 Trp Leu Val Ser Lys Trp Met Arg Thr Pro Val Cys Gly Gln Ser Pro 70 75 Ala Met Thr Asp Arg Pro Arg Ser Glu Ala Gly Arg Asp His Arg Arg 90 Ala Lys Ala Leu Pro Gly Leu Ile Pro Gly Ser Asn Pro Asn Leu Glu 105 110 Ala Cys Gly His Gln Ala Leu Cys Ser Ser Ser Val Ala Ser Val Gln 120 125 Gly Pro Trp Pro Leu Leu Pro Asn Ala Ser Ser Pro Pro Thr Pro Gly 130 135 140 Gln Pro Gln Pro 148

<210> 1290
<211> 170
<212>Amino acid
. <213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(170)
<223> X = any amino acid or stop code

35 40 45 Leu Asp Gln Val Ser Gln Phe Gly Cys Arg Ser Phe Ala Leu Leu Phe 50 55 Asp Asp Ile Asp His Asn Met Cys Ala Ala Asp Lys Glu Val Phe Ser 70 Ser Phe Ala His Ala Gln Val Ser Ile Thr Asn Glu Ile Tyr Gln Tyr 85 90 Leu Gly Glu Pro Glu Thr Phe Leu Phe Cys Pro Thr Glu Tyr Cys Ile 100 105 Xaa Trp Leu Tyr Ile Xaa Leu Val Phe Leu Glu Tyr Ile Thr Tyr Lys 115 120 Gly Pro Trp Ala Pro Phe Ser Leu His Phe Pro Pro Pro Leu Val Cys 135 140 Lys Ser Arg Asn Leu Phe Leu Glu Asp Ile Phe Gln Asp Pro Lys Leu 150 155 Glu Lys Phe Xaa Glu Leu Ile Asn Asp Asn 165 170

<210> 1291 <211> 98 <212>Amino acid <213> Homo sapiens

<210> 1292 <211> 142 <212>Amino acid <213> Homo sapiens

<211> 89
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(89)
<223> X = any amino acid or stop code

<210> 1294 <211> 80 <212>Amino acid . <213> Homo sapiens

<210> 1293

<210> 1295 <211> 281 <212>Amino acid <213> Homo sapiens

<400> 1295 Ala Glu Met Ala Asp Asp Leu Gly Asp Glu Trp Trp Glu Asn Gln Pro 10 Thr Gly Ala Gly Ser Ser Pro Glu Ala Ser Asp Gly Glu Gly Glu Gly 25 Asp Thr Glu Val Met Gln Glu Glu Thr Val Pro Val Pro Val Pro Ser 40 Glu Lys Thr Lys Gln Pro Lys Glu Cys Phe Leu Ile Gln Pro Lys Glu 55 Arg Lys Glu Asn Thr Thr Lys Thr Arg Lys Arg Arg Lys Lys Ile 70 75 Thr Asp Val Leu Ala Lys Ser Glu Pro Lys Pro Gly Leu Pro Glu Asp 90 Leu Gln Lys Leu Met Lys Asp Tyr Tyr Ser Ser Arg Arg Leu Val Ile 100 105 Glu Leu Glu Glu Leu Asn Leu Pro Asp Ser Cys Phe Leu Lys Ala Asn 120 Asp Leu Thr His Ser Leu Ser Ser Tyr Leu Lys Glu Ile Cys Pro Lys 135 Trp Val Lys Leu Arg Lys Asn His Ser Glu Lys Lys Ser Val Leu Met 150 155 Leu Ile Cys Ser Ser Ala Val Arg Ala Leu Glu Leu Ile Arg Ser 165 170 Met Thr Ala Phe Arg Gly Asp Gly Lys Val Ile Lys Leu Phe Ala Lys 180 185 His Ile Lys Val Gln Ala Gln Val Lys Leu Leu Glu Lys Arg Val Val 200 His Leu Gly Val Gly Thr Pro Gly Arg Ile Lys Glu Leu Val Lys Gln 215 220 Gly Gly Leu Asn Leu Ser Pro Leu Lys Phe Leu Val Phe Asp Trp Asn 230 235 Trp Arg Asp Gln Lys Leu Arg Arg Met Met Asp Ile Pro Glu Ile Arg 245 250 Lys Glu Val Phe Glu Leu Leu Glu Met Gly Val Leu Ser Leu Cys Lys 260 265 Ser Glu Ser Leu Lys Leu Gly Leu Phe 280 281

<210> 1296 <211> 213 <212>Amino acid <213> Homo sapiens

Glu Ile Met Gly Ser Thr Trp Gly Ser Pro Gly Trp Val Arg Leu Ala 55 Leu Cys Leu Thr Gly Leu Val Leu Ser Leu Tyr Ala Leu His Val Lys 70 75 Ala Ala Arg Ala Arg Asp Arg Asp Tyr Arg Ala Leu Cys Asp Val Gly 90 Thr Ala Ile Ser Cys Ser Arg Val Phe Ser Ser Arg Trp Gly Arg Gly 105 Phe Gly Leu Val Glu His Val Leu Gly Gln Asp Ser Ile Leu Asn Gln 120 Ser Asn Ser Ile Phe Gly Cys Ile Phe Tyr Thr Leu Gln Leu Leu 135 140 Gly Cys Leu Arg Thr Arg Trp Ala Ser Val Leu Met Leu Leu Ser Ser 150 155 Leu Val Ser Leu Ala Gly Ser Val Tyr Leu Ala Trp Ile Leu Phe Phe 165 170 Val Leu Tyr Asp Phe Cys Ile Val Cys Ile Thr Thr Tyr Ala Ile Asn 180 185 Val Ser Leu Met Trp Leu Ser Phe Arg Lys Val Gln Glu Pro Gln Gly 195 200 Lys Ala Lys Arg His 210 213

<210> 1297 <211> 353 <212>Amino acid <213> Homo sapiens

Glu Ser Pro Ala Pro Pro Ala Phe Arg Pro Ala Met Ala Ala Val Ala Leu Met Pro Pro Pro Leu Leu Leu Leu Leu Leu Ala Ser Pro Pro 25 Ala Ala Ser Ala Pro Ser Ala Arg Asp Pro Phe Ala Pro Gln Leu Gly Asp Thr Gln Asn Cys Gln Leu Arg Cys Arg Asp Arg Asp Leu Gly Pro 55 Gln Pro Ser Gln Ala Gly Leu Glu Gly Ala Ser Glu Ser Pro Tyr Asp 70 75 Arg Ala Val Leu Ile Ser Ala Cys Glu Arg Gly Cys Arg Leu Phe Ser 85 90 Ile Cys Arg Phe Val Ala Arg Ser Ser Lys Pro Asn Ala Thr Gln Thr 105 Glu Cys Glu Ala Ala Cys Val Glu Ala Tyr Val Lys Glu Ala Glu Gln 120 125 Gln Ala Cys Ser His Gly Cys Trp Ser Gln Pro Ala Glu Pro Glu Pro 135 140 Glu Gln Lys Arg Lys Val Leu Glu Ala Pro Ser Gly Ala Leu Ser Leu 150 155 Leu Asp Leu Phe Ser Thr Leu Cys Asn Asp Leu Val Asn Ser Ala Gln 165 170 Gly Phe Val Ser Ser Thr Trp Thr Tyr Tyr Leu Gln Thr Asp Asn Gly 185 Lys Val Val Phe Gln Thr Gln Pro Ile Val Glu Ser Leu Gly Phe 200 Gln Gly Gly Arg Leu Gln Arg Val Glu Val Thr Trp Arg Gly Ser His 220 215 Pro Glu Ala Leu Glu Val His Val Asp Pro Val Gly Pro Leu Asp Lys

Val Arg Lys Ala Lys Ile Arg Val Lys Thr Ser Ser Lys Ala Lys Val 245 250 Glu Ser Glu Glu Pro Gln Asp Asn Asp Phe Leu Ser Cys Met Ser Arg 265 Arg Ser Gly Leu Pro Arg Trp Ile Leu Ala Cys Cys Leu Phe Leu Ser 280 Val Leu Val Met Leu Trp Leu Ser Cys Ser Thr Leu Val Thr Ala Pro 295 300 Gly Gln His Leu Lys Phe Gln Pro Leu Thr Leu Glu Gln His Lys Gly 310 315 Phe Met Met Glu Pro Asp Trp Pro Leu Tyr Pro Pro Pro Ser His Ala 330 Cys Glu Asp Ser Leu Pro Pro Tyr Lys Leu Lys Leu Asp Leu Thr Lys 345 353

<210> 1298 <211> 161

> <212>Amino acid <213> Homo sapiens

<400> 1298

Phe Pro Glu Leu Gly Thr Ser Leu Ser Ala Met Arg Phe Leu Ala Ala 10 Thr Phe Leu Leu Ala Leu Ser Thr Ala Ala Gln Ala Glu Pro Val 25 Gln Phe Lys Asp Cys Gly Ser Val Asp Gly Val Ile Lys Glu Val Asn 40 Val Ser Pro Cys Pro Thr Gln Pro Cys Gln Leu Ser Lys Gly Gln Ser 55 Tyr Ser Val Asn Val Thr Phe Thr Ser Asn Ile Gln Ser Lys Ser Ser 70 75 Lys Ala Val Val His Gly Ile Leu Met Gly Val Pro Val Pro Phe Pro 85 Ile Pro Glu Pro Asp Gly Cys Lys Ser Gly Ile Asn Cys Pro Ile Gln 100 105 Lys Asp Lys Thr Tyr Ser Tyr Leu Asn Lys Leu Pro Val Lys Ser Glu 120 Tyr Pro Ser Ile Lys Leu Val Val Glu Trp Gln Leu Gln Asp Asp Lys 135 Asn Gln Ser Leu Phe Cys Trp Glu Ile Pro Val Gln Ile Val Ser His 150 155 Leu 161

<210> 1299 <211> 128 <212>Amino acid <213> Homo sapiens

<400> 1299

Ala Pro Glu Thr Phe Arg Cys Val Trp Arg Leu Gln Gly Leu Thr Phe

Ile Ala Phe Thr Glu Leu Gln Ala Lys Val Ile Asp Thr Gln Gln Lys 25 Val Lys Leu Ala Asp Ile Gln Ile Glu Gln Leu Asn Arg Thr Lys Lys 40 His Ala His Leu Thr Asp Thr Glu Ile Met Thr Leu Val Asp Glu Thr 55 60 Asn Met Tyr Glu Gly Val Gly Arg Met Phe Ile Leu Gln Ser Lys Glu 75 Ala Ile His Ser Gln Leu Leu Glu Lys Gln Lys Ile Ala Glu Glu Lys 85 90 Ile Lys Glu Leu Glu Gln Lys Lys Ser Tyr Leu Glu Arg Ser Val Lys 105 Glu Ala Glu Asp Asn Ile Arg Glu Met Leu Met Ala Arg Arg Ala Gln 120

<210> 1300 <211> 265 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(265) <223> X = any amino acid or stop code

<400> 1300 His Ser Leu Leu Gly Thr Arg Val Arg Asp Ala Ser Ser Lys Ile 10 Gln Gly Glu Tyr Thr Leu Thr Leu Arg Lys Gly Gly Asn Asn Lys Leu 20 Ser Arg Val Phe His Arg Asp Gly His Tyr Gly Phe Ser Glu Pro Leu Thr Phe Cys Ser Val Val Asp Leu Ile Asn His Tyr Arg His Glu Ser 55 Leu Ala Gln Tyr Asn Ala Lys Leu Asp Thr Arg Leu Leu Tyr Pro Val Ser Lys Tyr Gln Gln Val Arg Ala Gly Leu Gly Ala Arg Glu Gly Ser 90 Thr Trp Leu Ala Pro Gly Leu Ser Phe Leu Gly Arg Pro Asp Gln Ala 105 Met His Leu Pro Ser Phe Arg His Val Ser Pro Asp Gln Ile Val Lys 120 125 Glu Asp Ser Val Glu Ala Val Gly Ala Gln Leu Lys Val Tyr His Gln 135 140 Gln Tyr Gln Asp Lys Ser Arg Glu Tyr Asp Gln Leu Tyr Glu Glu Tyr 150 155 Thr Arg Thr Ser Gln Glu Leu Gln Met Lys Arg Thr Ala Ile Glu Ala 170 Phe Asn Glu Thr Ile Lys Ile Phe Glu Glu Gln Gly Gln Thr Gln Glu 185 Lys Cys Ser Lys Glu Tyr Leu Glu Arg Phe Arg Arg Glu Gly Asn Gln 200 Thr Lys Glu Met Gln Arg Ile Leu Leu Asn Ser Glu Arg Leu Lys Ser 215 Arg Ile Ala Glu Ile His Glu Ser Pro His Arg Ser Trp Glu Gln Gln 235 Leu Leu Val Pro Arg Ala Ser Asp Asn Lys Arg Asp Ile Asp Lys Pro

245 250 255 His Xaa Thr Ser Leu Lys Pro Asp Leu

His Xaa Thr Ser Leu Lys Pro Asp Leu 260 265

<210> 1301 <211> 490 <212>Amino acid <213> Homo sapiens

<400> 1301 Ala Ala Ala Ala Gly Arg Gly Arg Ser Ser Gly Arg Arg Arg Arg Arg Pro Gly Ala Leu Phe Ala Ser Leu Gly Val Leu Leu Gly Pro Arg Pro Pro Pro Gly Ile Pro Arg Thr Arg Ala Cys Ser Met Gly Gly 40 Val Gly Glu Pro Gly Pro Arg Glu Gly Pro Ala Gln Pro Gly Ala Pro Leu Pro Thr Phe Cys Trp Glu Gln Ile Arg Ala His Asp Gln Pro Gly 70 75 Asp Lys Trp Leu Val Ile Glu Arg Arg Val Tyr Asp Ile Ser Arg Trp 85 90 Ala Gln Arg His Pro Gly Gly Ser Arg Leu Ile Gly His His Gly Ala 105 Glu Asp Ala Thr Asp Ala Phe Arg Ala Phe His Gln Asp Leu Asn Phe 120 Val Arg Lys Phe Leu Gln Pro Leu Leu Ile Gly Glu Leu Ala Pro Glu 135 140 Glu Pro Ser Gln Asp Gly Pro Leu Asn Ala Gln Leu Val Glu Asp Phe 150 155 Arg Ala Leu His Gln Ala Ala Glu Asp Met Lys Leu Phe Asp Ala Ser 165 170 Pro Thr Phe Phe Ala Phe Leu Leu Gly His Ile Leu Ala Met Glu Val 185 Leu Ala Trp Leu Leu Ile Tyr Leu Leu Gly Pro Gly Trp Val Pro Ser 200 205 Ala Leu Ala Ala Phe Ile Leu Ala Ile Ser Gln Ala Gln Ser Trp Cys 215 220 Leu Gln His Asp Leu Gly His Ala Ser Ile Phe Lys Lys Ser Trp Trp 230 235 Asn His Val Ala Gln Lys Phe Val Met Gly Gln Leu Lys Gly Phe Ser 245 250 Ala His Trp Trp Asn Phe Arg His Phe Gln His His Ala Lys Pro Asn 265 Ile Phe His Lys Asp Pro Asp Val Thr Val Ala Pro Val Phe Leu Leu 280 Gly Glu Ser Ser Val Glu Tyr Gly Lys Lys Lys Arg Arg Tyr Leu Pro 295 300 Tyr Asn Gln Gln His Leu Tyr Phe Phe Leu Ile Gly Pro Pro Leu Leu 310 315 Thr Leu Val Asn Phe Glu Val Glu Asn Leu Ala Tyr Met Leu Val Cys 330 Met Gln Trp Ala Asp Leu Leu Trp Ala Ala Ser Phe Tyr Ala Arg Phe 345 Phe Leu Ser Tyr Leu Pro Phe Tyr Gly Val Pro Gly Val Leu Leu Phe 360 Phe Val Ala Val Arg Val Leu Glu Ser His Trp Phe Val Trp Ile Thr 380 Gln Met Asn His Ile Pro Lys Glu Ile Gly His Glu Lys His Arg Asp

390 395 Trp Val Ser Ser Gln Leu Ala Ala Thr Cys Asn Val Glu Pro Ser Leu 405 410 Phe Thr Asn Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu His His 420 425 Leu Phe Pro Arg Met Pro Arg His Asn Tyr Ser Arg Val Ala Pro Leu 435 440 Val Lys Ser Leu Cys Ala Lys His Gly Leu Ser Tyr Glu Val Lys Pro 460 450 455 Phe Leu Thr Ala Leu Val Asp Ile Val Arg Ser Leu Lys Lys Ser Gly 470 475 480 Asp Ile Trp Leu Asp Ala Tyr Leu His Gln 485

<210> 1302 <211> 110 <212>Amino acid <213> Homo sapiens

<400> 1302 Lys Ser Arg Ala Thr Arg Leu Arg Glu Ser Ala Glu Met Thr Gly Phe 1 5 Leu Leu Pro Pro Ala Ser Arg Gly Thr Arg Arg Ser Cys Ser Arg Ser 25 Arg Lys Arg Gln Thr Arg Arg Arg Arg Asn Pro Ser Ser Phe Val Ala 35 40 Ser Cys Pro Thr Leu Leu Pro Phe Ala Cys Val Pro Gly Ala Ser Pro 55 Thr Thr Leu Ala Phe Pro Pro Val Val Leu Thr Gly Pro Ser Thr Asp 70 Gly Ile Pro Phe Ala Leu Ser Leu Gln Arg Val Pro Phe Val Leu Pro 90 Ser Pro Gln Val Ala Ser Leu Pro Leu Gly His Ser Arg Gly 105

<210> 1303 <211> 138 <212>Amino acid <213> Homo sapiens

<400> 1303 Ile Gln Tyr Arg Ser Asp Leu Glu Leu His Ser Ile Thr Met Lys Lys 5 10 15 Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val Leu Ile Gly 20 25 Val Gln Gly Thr Pro Val Val Arg Lys Gly Arg Cys Ser Cys Ile Ser 40 45 Thr Asn Gln Gly Thr Ile His Leu Gln Ser Leu Lys Asp Leu Lys Gln Phe Ala Pro Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile Ala Thr Leu 75 Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Ala Asp Val Lys Glu Leu Ile Lys Lys Trp Glu Lys Gln Val Ser Gln Lys Lys Lys Gln

Lys Asn Gly Lys Lys His Gln Lys Lys Lys Val Leu Lys Val Arg Lys Lys Gln Arg Lys 115 120 125

Ser Gln Arg Ser Arg Gln Lys Lys Thr Thr 130 135 138

<210> 1304 <211> 1000 <212>Amino acid <213> Homo sapiens

<400> 1304 Ile Pro Gly Ser Thr Ile Ser Cys Arg Gly Cys Cys Gly Lys Trp Pro 10 Val Gln Glu Ala Asp Pro Pro Arg Ala Ala Leu Arg Gly Arg Phe Pro 20 Ala Leu Leu Thr Arg His Cys Pro Ser Pro Arg Ala Glu Lys Glu Lys 40 Arg Ser Leu Arg Arg Cys Gly Cys Arg Pro Leu Leu Val Glu Leu Ala 55 Gly Pro Ala Gly Gln Ala Val Glu Val Leu Pro His Phe Glu Ser Leu 70 Gly Lys Gln Glu Lys Ile Pro Asn Lys Met Ser Ala Phe Arg Asn His 90 Cys Pro His Leu Asp Ser Val Gly Glu Ile Thr Lys Glu Asp Leu Ile 105 Gln Lys Ser Leu Gly Thr Cys Gln Asp Cys Lys Val Gln Gly Pro Asn 120 125 Leu Trp Ala Cys Leu Glu Asn Arg Cys Ser Tyr Val Gly Cys Gly Glu 135 140 Ser Gln Val Asp His Ser Thr Ile His Ser Gln Glu Thr Lys His Tyr 150 155 Leu Thr Val Asn Leu Thr Thr Leu Arg Val Trp Cys Tyr Ala Cys Ser 165 170 Lys Glu Val Phe Leu Asp Arg Lys Leu Gly Thr Gln Pro Ser Leu Pro 185 His Val Arg Gln Pro His Gln Ile Gln Glu Asn Ser Val Gln Asp Phe 200 Lys Ile Pro Ser Asn Thr Thr Leu Lys Thr Pro Leu Val Ala Val Phe 215 Asp Asp Leu Asp Ile Glu Ala Asp Glu Glu Asp Glu Leu Arg Ala Arg 230 235 Gly Leu Thr Gly Leu Lys Asn Ile Gly Asn Thr Cys Tyr Met Asn Ala 250 Ala Leu Gln Ala Leu Ser Asn Cys Pro Pro Leu Thr Gln Phe Phe Leu 265 Asp Cys Gly Gly Leu Ala Arg Thr Asp Lys Lys Pro Ala Ile Cys Lys 275 280 Ser Tyr Leu Lys Leu Met Thr Glu Leu Trp Tyr Lys Ser Arg Pro Gly 295 300 Ser Val Val Pro Thr Thr Leu Phe Gln Gly Ile Lys Thr Val Asn Pro 310 315 Thr Phe Arg Gly Tyr Ser Gln Gln Asp Ala Gln Glu Phe Leu Arg Cys 325 330 Leu Met Asp Leu Leu His Glu Glu Leu Lys Glu Gln Val Met Glu Val 340 345 350 Glu Glu Asp Pro Gln Thr Ile Thr Thr Glu Glu Thr Met Glu Glu Asp 360 Lys Ser Gln Ser Asp Val Asp Phe Gln Ser Cys Glu Ser Cys Ser Asn

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375
                                            380
 Ser Asp Arg Ala Glu Asn Glu Asn Gly Ser Arg Cys Phe Ser Glu Asp
                     390
                                       395
 Asn Asn Glu Thr Thr Met Leu Ile Gln Asp Asp Glu Asn Asn Ser Glu
                 405
                                    410
 Met Ser Lys Asp Trp Gln Lys Glu Lys Met Cys Asn Lys Ile Asn Lys
            420
                                425
 Val Asn Ser Glu Gly Glu Phe Asp Lys Asp Arg Asp Ser Ile Ser Glu
                            440
 Thr Val Asp Leu Asn Asn Gln Glu Thr Val Lys Val Gln Ile His Ser
                        455
 Arg Ala Ser Glu Tyr Ile Thr Asp Val His Ser Asn Asp Leu Ser Thr
                    470
                                        475
 Pro Gln Ile Leu Pro Ser Asn Glu Gly Val Asn Pro Arg Leu Ser Ala
                485
                                    490
 Ser Pro Pro Lys Ser Gly Asn Leu Trp Pro Gly Leu Ala Pro Pro His
                                505
 Lys Lys Ala Gln Ser Ala Ser Pro Lys Arg Lys Lys Gln His Lys Lys
                            520
 Tyr Arg Ser Val Ile Ser Asp Ile Phe Asp Gly Thr Ile Ile Ser Ser
                       535
                                            540
Val Gln Cys Leu Thr Cys Asp Arg Val Ser Val Thr Leu Glu Thr Phe
                   550
                                       555
Gln Asp Leu Ser Leu Pro Ile Pro Gly Lys Glu Asp Leu Ala Lys Leu
                565
                                   570
His Ser Ser Ser His Pro Thr Ser Ile Val Lys Ala Gly Ser Cys Gly
                               585
Glu Ala Tyr Ala Pro Gln Gly Trp Ile Ala Phe Phe Met Glu Tyr Val
        595
                          600
Lys Arg Phe Val Val Ser Cys Val Pro Ser Trp Phe Trp Gly Pro Val
                       615
Val Thr Leu Gln Asp Cys Leu Ala Ala Phe Phe Ala Arg Asp Glu Leu
                   630
                                       635
Lys Gly Asp Asn Met Tyr Ser Cys Glu Lys Cys Lys Leu Arg Asn
                645
                        650
Gly Val Lys Phe Cys Lys Val Gln Asn Phe Pro Glu Ile Leu Cys Ile
                               665
His Leu Lys Arg Phe Arg His Glu Leu Met Phe Ser Thr Lys Ile Ser
        675
                            680
Thr His Val Ser Phe Pro Leu Glu Gly Leu Asp Leu Gln Pro Phe Leu
                                           700
Ala Lys Asp Ser Pro Ala Gln Ile Val Thr Tyr Asp Leu Leu Ser Val
                    710
                                       715
Ile Cys His His Gly Thr Ala Ser Ser Gly His Tyr Ile Ala Tyr Cys
                725
                                   730
Arg Asn Asn Leu Asn Asn Leu Trp Tyr Glu Phe Asp Asp Gln Ser Val
                               745
Thr Glu Val Ser Glu Ser Thr Val Gln Asn Ala Glu Ala Tyr Val Leu
                            760
Phe Tyr Arg Lys Ser Ser Glu Glu Ala Gln Lys Glu Arg Arg Ile
                        775
Ser Asn Leu Leu Asn Ile Met Glu Pro Ser Leu Leu Gln Phe Tyr Ile
                    790
                                       795
Ser Arg Gln Trp Leu Asn Lys Phe Lys Thr Phe Ala Glu Pro Gly Pro
                                   810
Ile Ser Asn Asn Asp Phe Leu Cys Ile His Gly Gly Val Pro Pro Arg
                               825
Lys Ala Gly Tyr Ile Glu Asp Leu Val Leu Met Leu Pro Gln Asn Ile
                           840
Trp Asp Asn Leu Tyr Ser Arg Tyr Gly Gly Gly Pro Ala Val Asn His
                       855
Leu Tyr Ile Cys His Thr Cys Gln Ile Glu Ala Glu Lys Ile Glu Lys
                                       875
Arg Arg Lys Thr Glu Leu Glu Ile Phe Ile Arg Leu Asn Arg Ala Phe
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885 890 Gln Lys Glu Asp Ser Pro Ala Thr Phe Tyr Cys Ile Ser Met Gln Trp 900 905 Phe Arg Glu Trp Glu Ser Phe Val Lys Gly Lys Asp Gly Asp Pro Pro 920 925 Gly Pro Ile Asp Asn Thr Lys Ile Ala Val Thr Lys Cys Gly Asn Val 935 Met Leu Arg Gln Gly Ala Asp Ser Gly Gln Ile Ser Glu Glu Thr Trp 950 955 Asn Phe Leu Gln Ser Ile Tyr Gly Gly Pro Glu Val Ile Leu Arg 965 970 Pro Pro Val Val His Val Asp Pro Asp Ile Leu Gln Ala Glu Glu Lys . 985 Ile Glu Val Glu Thr Arg Ser Leu

<210> 1305 <211> 141 <212>Amino acid <213> Homo sapiens

<400> 1305 Ser Pro Ser Ala Ala Gly Gly Leu Ala Trp Val Ser Leu Ala Leu Gly Ser Gly Ser Arg Gly Arg Asp His Ser Gly Ser Gly Val Gly Thr Ala 25 Met Ala Gly Ala Leu Val Arg Lys Ala Ala Asp Tyr Val Arg Ser Lys 40 Asp Phe Arg Asp Tyr Leu Met Ser Thr His Phe Trp Gly Pro Val Ala 55 Asn Trp Gly Leu Pro Ile Ala Ala Ile Asn Asp Met Lys Lys Ser Pro 75 Glu Ile Ile Ser Gly Arg Met Thr Phe Ala Leu Cys Cys Tyr Ser Leu 90 Thr Phe Met Arg Phe Ala Tyr Lys Val Gln Pro Arg Asn Trp Leu Leu 100 105 Phe Ala Cys His Ala Thr Asn Glu Val Ala Gln Leu Ile Gln Gly Gly 115 120 Arg Leu Ile Lys His Glu Met Thr Lys Thr Ala Ser Ala 135 140 141

<210> 1306 <211> 386 <212>Amino acid <213> Homo sapiens

55 60 Gly Ser Asp Thr Ala Val Asp Ala Ala Phe Glu Pro Val Tyr Trp Leu 70 75 Val Asp Asn Val Ile Arg Trp Phe Gly Val Val Phe Val Val Leu Val 90 Ile Val Leu Thr Gly Ser Ile Val Ala Ile Ala Tyr Leu Cys Val Leu 105 110 Pro Leu Ile Leu Arg Thr Tyr Ser Val Pro Arg Leu Cys Trp His Phe 120 125 Phe Tyr Ser His Trp Asn Leu Ile Leu Ile Val Phe His Tyr Tyr Gln 135 140 Ala Ile Thr Thr Pro Pro Gly Tyr Pro Pro Gln Gly Arg Asn Asp Ile 150 155 Ala Thr Val Ser Ile Cys Lys Lys Cys Ile Tyr Pro Lys Pro Ala Arg 165 170 Thr His His Cys Ser Ile Cys Asn Arg Cys Val Leu Lys Met Asp His 180 185 His Cys Pro Trp Leu Asn Asn Cys Val Gly His Tyr Asn His Arg Tyr 195 200 Phe Phe Ser Phe Cys Phe Phe Met Thr Leu Gly Cys Val Tyr Cys Ser 215 220 Tyr Gly Ser Trp Asp Leu Phe Arg Glu Ala Tyr Ala Ala Ile Glu Lys 230 235 Met Lys Gln Leu Asp Lys Asn Lys Leu Gln Ala Val Ala Asn Gln Thr 245 250 Tyr His Gln Thr Pro Pro Pro Thr Phe Ser Phe Arg Glu Arg Met Thr 265 270 His Lys Ser Leu Val Tyr Leu Trp Phe Leu Cys Ser Ser Val Ala Leu 275 280 285 Ala Leu Gly Ala Leu Thr Val Trp His Ala Val Leu Ile Ser Arg Gly 295 300 Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys Glu Arg Arg Leu 305 310 315 Gln Ala Lys Gly Arg Val Phe Arg Asn Pro Tyr Asn Tyr Gly Cys Leu 325 330 Asp Asn Trp Lys Val Phe Leu Gly Val Asp Thr Gly Arg His Trp Leu 340 345 Thr Arg Val Leu Leu Pro Ser Ser His Leu Pro His Gly Asn Gly Met 355 360 Ser Trp Glu Pro Pro Pro Trp Val Thr Ala His Ser Ala Ser Val Met 375 Ala Val 385 386

<210> 1307 <211> 298 . <212>Amino acid <213> Homo sapiens

70 75 Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile 85 90 Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Ile Lys 105 Lys Leu Pro Arg Asn Pro Gln Arg Glu Glu Ile Ile Gly Asn Gly Glu 120 Gln Gln Tyr Val Tyr Leu Lys Asp Gly Asp Val Ile Lys Thr Glu Gly 135 Ala Thr Leu Arg Val Leu Tyr Thr Pro Gly His Thr Asp Asp His Met 150 155 Ala Leu Leu Glu Glu Glu Asn Ala Ile Phe Ser Gly Asp Cys Ile 170 Leu Gly Glu Gly Thr Thr Val Phe Glu Asp Leu Tyr Asp Tyr Met Asn 185 Ser Leu Lys Glu Leu Leu Lys Ile Lys Ala Asp Ile Ile Tyr Pro Gly 200 His Gly Pro Val Ile His Asn Ala Glu Ala Lys Ile Gln Gln Tyr Ile 215 220 Ser His Arg Asn Ile Arg Glu Gln Gln Ile Leu Thr Leu Phe Arg Glu 230 235 Asn Phe Glu Lys Ser Phe Thr Val Met Glu Leu Val Lys Ile Ile Tyr 245 250 Lys Asn Thr Pro Glu Asn Leu His Glu Met Ala Lys His Asn Leu Leu 260 265 Leu His Leu Lys Lys Leu Glu Lys Glu Gly Lys Ile Phe Ser Asn Thr 280 Asp Pro Asp Lys Lys Trp Lys Ala His Leu 295

<210> 1308 <211> 306 <212>Amino acid <213> Homo sapiens

<400> 1308 Glu Leu His Arg Ala Gly Gln Val Ala Gly Gly Ala Arg Arg Ser Arg Arg Glu Ser Met Glu Leu Glu Arg Ile Val Ser Ala Ala Leu Leu Ala 25 Phe Val Gln Thr His Leu Pro Glu Ala Asp Leu Ser Gly Leu Asp Glu ·40 Val Ile Phe Ser Tyr Val Leu Gly Val Leu Glu Asp Leu Gly Pro Ser 55 Gly Pro Ser Glu Glu Asn Phe Asp Met Glu Ala Phe Thr Glu Met Met Glu Ala Tyr Val Pro Gly Phe Ala His Ile Pro Arg Gly Thr Ile Gly 90 Asp Met Met Gln Lys Leu Ser Gly Gln Leu Ser Asp Ala Arg Asn Lys 105 Glu Asn Leu Gln Pro Gln Ser Ser Gly Val Gln Gly Gln Val Pro Ile 120 125 Ser Pro Glu Pro Leu Gln Arg Pro Glu Met Leu Lys Glu Glu Thr Arg 135 140 Ser Ser Ala Ala Ala Ala Asp Thr Gln Asp Glu Ala Thr Gly Ala 150 155 Glu Glu Glu Leu Leu Pro Gly Val Asp Val Leu Leu Glu Val Phe Pro 165 170 Thr Cys Ser Val Glu Gln Ala Gln Trp Val Leu Ala Lys Ala Arg Gly

180 185 Asp Leu Glu Glu Ala Val Gln Met Leu Val Glu Gly Lys Glu Gly 200 205 Pro Ala Ala Trp Glu Gly Pro Asn Gln Asp Leu Pro Arg Arg Leu Arg 215 220 Gly Pro Gln Lys Asp Glu Leu Lys Ser Phe Ile Leu Gln Lys Tyr Met 230 235 Met Val Asp Ser Ala Glu Asp Gln Lys Ile His Arg Pro Met Ala Pro 245 250 Lys Glu Ala Pro Lys Lys Leu Ile Arg Tyr Ile Asp Asn Gln Val Val 260 265 Ser Thr Lys Gly Glu Arg Phe Lys Asp Val Arg Asn Pro Glu Ala Glu 280 285 Glu Met Lys Ala Thr Tyr Ile Asn Leu Lys Pro Ala Arg Lys Tyr Arg 295 Phe His 305 306

<210> 1309 <211> 174 <212>Amino acid <213> Homo sapiens

<400> 1309 Phe Ile Thr Gly Lys Gly Ile Val Ala Ile Leu Arg Cys Leu Gln Phe 1 5 10 Asn Glu Thr Leu Thr Glu Leu Arg Phe His Asn Gln Arg His Met Leu 20 25 Gly His His Ala Glu Met Glu Ile Ala Arg Leu Leu Lys Ala Asn Asn Thr Leu Leu Lys Met Gly Tyr His Phe Glu Leu Pro Gly Pro Arg Met 55 Val Val Thr Asn Leu Leu Thr Arg Asn Gln Asp Lys Gln Arg Gln Lys 70 Arg Gln Glu Glu Gln Lys Gln Gln Leu Lys Glu Gln Lys Leu 85 90 ° Ile Ala Met Leu Glu Asn Gly Leu Gly Leu Pro Pro Gly Met Trp Glu 105 Leu Leu Gly Gly Pro Lys Pro Asp Ser Arg Met Gln Glu Phe Phe Gln 120 Pro Pro Pro Pro Arg Pro Pro Asn Pro Gln Asn Val Pro Phe Ser Gln 135 140 Arg Ser Glu Met Met Lys Lys Pro Ser Gln Ala Pro Lys Tyr Arg Thr 150 155 Asp Pro Asp Ser Phe Arg Val Val Lys Leu Lys Arg Ile Gln

<210> 1310 <211> 616 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(616) <223> X = any amino acid or stop code

<400> 1310 Gly Gly Arg Ala Gly Thr Gln Cys Cys Trp Arg Ala Gly Ala Arg Leu 10 Arg Gly Ile Ser Pro Ser Pro Ala Leu Pro Glu Ala Pro Gly Leu Cys Arg Val Arg Ala Gly Leu Gly Ala Gly Ala Leu Gly Arg Ser Pro Ala Gly Arg Arg Arg Gly Pro Arg Val Ser Ser Pro Ala Pro His 55 Pro Arg Arg Val Leu Cys Arg Cys Leu Leu Phe Leu Phe Phe Ser Cys 70 His Asp Arg Arg Gly Asp Ser Gln Pro Tyr Gln Ala Leu Lys Tyr Ser 85 90 Ser Lys Ser His Pro Ser Ser Gly Asp His Arg His Glu Lys Met Arg 105 Asp Ala Gly Asp Pro Ser Pro Pro Asn Lys Met Leu Arg Arg Ser Asp 120 Ser Pro Glu Asn Lys Tyr Ser Asp Ser Thr Gly His Ser Lys Ala Lys 135 Asn Val His Thr His Arg Val Arg Glu Arg Asp Gly Gly Thr Ser Tyr 150 155 Ser Pro Gln Glu Asn Ser His Asn His Ser Ala Leu His Ser Ser Asn 170 Phe Thr Phe Phe Leu Ile Pro Ser Asn Xaa Pro Gln Gly Lys Thr Phe 185 Arg Ile Ala Pro Tyr Asp Ser Ala Asp Asp Trp Ser Leu Glu His Ile 200 Ser Ser Ser Gly Glu Lys Tyr Tyr Tyr Asn Cys Arg Thr Glu Val Ser 215 Gln Trp Gly Lys Thr Pro Lys Ser Gly Leu Glu Arg Gly Gln Arg Gln 230 235 Lys Glu Ala Asn Lys Met Ala Val Asn Ser Phe Pro Lys Asp Arg Asp 245 250 Tyr Arg Arg Glu Val Met Gln Ala Thr Ala Thr Ser Gly Phe Ala Ser 260 265 Gly Lys Ser Thr Ser Gly Asp Lys Pro Val Ser His Ser Cys Thr Thr 280 Pro Ser Thr Ser Ser Ala Ser Gly Leu Asn Pro Thr Ser Ala Pro Pro 295 300 Thr Ser Ala Ser Ala Val Pro Val Ser Pro Val Pro Gln Ser Pro Ile 310 315 Pro Pro Leu Leu Gln Asp Pro Asn Leu Leu Arg Gln Leu Leu Pro Ala 325 330 Leu Glu Ala Thr Leu Gln Leu Asn Asn Ser Asn Val Asp Ile Ser Ile 340 345 Ile Asn Glu Val Leu Thr Gly Asp Val Thr Gln Ala Ser Leu Gln Thr 360 Ile Ile His Lys Cys Leu Thr Ala Gly Pro Ser Val Phe Lys Ile Thr 375 Ser Leu Ile Ser Gln Ala Ala Gln Leu Ser Thr Gln Ala Gln Ala Ser 390 395 Asn Gln Ser Pro Met Ser Leu Thr Ser Asp Ala Ser Ser Pro Arg Ser 410 Tyr Val Ser Pro Arg Asn Lys Ala His Leu Lys Leu Asn Thr Val Pro 425 Ile Gln Thr Phe Gly Phe Ser Thr Pro Pro Val Ser Ser Gln Pro Lys 440 Val Ser Thr Pro Val Val Lys Gln Gly Pro Val Ser Gln Ser Ala Thr 455 460 Gln Gln Pro Val Thr Ala Asp Lys Gln Gln Gly His Glu Pro Val Ser 475

Pro Arg Ser Leu Gln Arg Ser Ser Ser Gln Arg Ser Pro Ser Pro Gly 485 490 Pro Asn His Thr Ser Asn Ser Ser Asn Ala Ser Asn Ala Thr Val Val 505 Pro Gln Asn Ser Ser Ala Arg Ser Thr Cys Ser Leu Thr Pro Ala Leu 520 Ala Ala His Phe Ser Glu Asn Leu Ile Lys His Val Gln Gly Trp Pro 535 Ala Asp His Ala Glu Lys Gln Ala Ser Arg Leu Arg Glu Glu Ala His 550 555 Asn Met Gly Thr Ile His Met Ser Glu Ile Cys Thr Glu Leu Lys Asn 565 570 Leu Arg Ser Leu Val Arg Val Cys Glu Ile Gln Ala Thr Leu Arg Glu 580 585 Gln Arg Ile Leu Phe Leu Arg Gln Gln Ile Lys Glu Leu Glu Lys Leu 595 600 Lys Asn Gln Asn Ser Phe Met Val 615 616

<210> 1311 <211> 387 <212>Amino acid <213> Homo sapiens

<400> 1311 Val Ala Pro Glu Cys Arg Gly Ala Tyr Pro Phe Arg Ala Met Met Pro Gly Thr Ala Leu Lys Ala Val Leu Leu Ala Val Leu Leu Val Gly Leu 25 Gln Thr Ala Thr Gly Arg Leu Leu Ser Gly Gln Pro Val Cys Arg Gly 40 Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His Asp Thr Ser 5.5 Arg Arg Leu Asn Phe Glu Glu Ala Lys Glu Ala Cys Arg Arg Asp Gly 70 Gly Gln Leu Val Ser Ile Glu Ser Glu Asp Glu Gln Lys Leu Ile Glu 90 Lys Phe Ile Glu Asn Leu Leu Pro Ser Asp Gly Asp Phe Trp Ile Gly 105 Leu Arg Arg Arg Glu Glu Lys Gln Ser Asn Ser Thr Ala Cys Gln Asp 120 Leu Tyr Ala Trp Thr Asp Gly Ser Ile Ser Gln Phe Arg Asn Trp Tyr 135 Val Asp Glu Pro Ser Cys Gly Ser Glu Val Cys Val Val Met Tyr His 150 155 Gln Pro Ser Ala Pro Ala Gly Ile Gly Gly Pro Tyr Met Phe Gln Trp 165 170 Asn Asp Asp Arg Cys Asn Met Lys Asn Asn Phe Ile Cys Lys Tyr Ser 180 185 190 Asp Glu Lys Pro Ala Val Pro Ser Arg Glu Ala Glu Gly Glu Glu Thr 200 Glu Leu Thr Thr Pro Val Leu Pro Glu Glu Thr Gln Glu Glu Asp Ala 215 220 Lys Lys Thr Phe Lys Glu Ser Arg Glu Ala Ala Leu Asn Leu Ala Tyr 230 235 Ile Leu Ile Pro Ser Ile Pro Leu Leu Leu Leu Val Val Thr Thr 250 245 Val Val Cys Trp Val Trp Ile Cys Arg Lys Arg Lys Arg Glu Gln Pro 265

Asp Pro Ser Thr Lys Lys Gln His Thr Ile Trp Pro Ser Pro His Gln 280 Gly Asn Ser Pro Asp Leu Glu Val Tyr Asn Val Ile Arg Lys Gln Ser 295 300 Glu Ala Asp Leu Ala Glu Thr Arg Pro Asp Leu Lys Asn Ile Ser Phe 310 315 Arg Val Cys Ser Gly Glu Ala Thr Pro Asp Asp Met Ser Cys Asp Tyr 325 330 Asp Asn Met Ala Val Asn Pro Ser Glu Ser Gly Phe Val Thr Leu Val 340 345 Ser Val Glu Ser Gly Phe Val Thr Asn Asp Ile Tyr Glu Phe Ser Pro 360 365 Asp Gln Met Gly Arg Ser Lys Glu Ser Gly Trp Val Glu Asn Glu Ile 370 375 Tyr Gly Tyr 385 387

<210> 1312 <211> 470 <212>Amino acid <213> Homo sapiens

<400> 1312 Thr Glu Trp Gly Leu Ser Gly Ser Cys Pro Gly Cys Ser Pro Leu Glu Pro Gly Ser Arg Gly Arg Gly Ala Ala Trp Arg Ile Leu Arg Cys 25 Arg Arg Leu Pro Glu Pro Ser Pro Phe Leu Thr Gln Pro Asn Leu Ala 40 Gln Ser Gln Pro Pro Ala Pro Val Pro Val Thr Asp Pro Ser Val Thr 55 Met His Pro Ala Val Phe Leu Ser Leu Pro Asp Leu Arg Cys Ser Leu 75 Leu Leu Val Thr Trp Val Phe Thr Pro Val Thr Thr Glu Ile Thr 85 90 Ser Leu Asp Thr Glu Asn Ile Asp Glu Ile Leu Asn Asn Ala Asp Val 105 Ala Leu Val Asn Phe Tyr Ala Asp Trp Cys Arg Phe Ser Gln Met Leu 120 His Pro Ile Phe Glu Glu Ala Ser Asp Val Ile Lys Glu Glu Phe Pro 135 Asn Glu Asn Gln Val Val Phe Ala Arg Val Asp Cys Asp Gln His Ser 150 155 Asp Ile Ala Gln Arg Tyr Arg Ile Ser Lys Tyr Pro Thr Leu Lys Leu 165 170 Phe Arg Asn Gly Met Met Lys Arg Glu Tyr Arg Gly Gln Arg Ser 185 Val Lys Ala Leu Ala Asp Tyr Ile Arg Gln Gln Lys Ser Asp Pro Ile 200 Gln Glu Ile Arg Asp Leu Ala Glu Ile Thr Thr Leu Asp Arg Ser Lys 215 220 Arg Asn Ile Ile Gly Tyr Phe Glu Gln Lys Asp Ser Asp Asn Tyr Arg 230 235 Val Phe Glu Arg Val Ala Asn Ile Leu His Asp Asp Cys Ala Phe Leu 250 Ser Ala Phe Gly Asp Val Ser Lys Pro Glu Arg Tyr Ser Gly Asp Asn 265 270 Ile Ile Tyr Lys Pro Pro Gly His Ser Ala Pro Asp Met Val Tyr Leu 275 285

Gly Ala Met Thr Asn Phe Asp Val Thr Tyr Asn Trp Ile Gln Asp Lys 295 Cys Val Pro Leu Val Arg Glu Ile Thr Phe Glu Asn Gly Glu Glu Leu 310 315 Thr Glu Glu Gly Leu Pro Phe Leu Ile Leu Phe His Met Lys Glu Asp 325 330 Thr Glu Ser Leu Glu Ile Phe Gln Asn Glu Val Ala Arg Gln Leu Ile 340 345 Ser Glu Lys Gly Thr Ile Asn Phe Leu His Ala Asp Cys Asp Lys Phe 360 Arg His Pro Leu Leu His Ile Gln Lys Thr Pro Ala Asp Cys Pro Val 375 Ile Ala Ile Asp Ser Phe Arg His Met Tyr Val Phe Gly Asp Phe Lys 390 395 Asp Val Leu Ile Pro Gly Lys Leu Lys Gln Phe Val Phe Asp Leu His 405 410 Ser Gly Lys Leu His Arg Glu Phe His His Gly Pro Asp Pro Thr Asp 420 425 Thr Ala Pro Gly Glu Gln Ala Gln Asp Val Ala Ser Ser Pro Pro Glu 440 Ser Ser Phe Gln Lys Leu Ala Pro Ser Glu Tyr Arg Tyr Thr Leu Leu 455 Arg Asp Arg Asp Glu Leu

<210> 1313 <211> 262 <212>Amino acid <213> Homo sapiens

<400> 1313 Leu Thr Pro Ser Val Gly Pro Val Phe Pro Gly Arg Pro Thr Arg Pro 10 Leu Ala Ser Pro Phe Pro Val Pro Leu His Arg Cys Ser Ala Gly Ser 20 25 Gln Pro Pro Gly Pro Val Pro Glu Gly Leu Ile Arg Ile Tyr Ser Met Arg Phe Cys Pro Tyr Ser His Arg Thr Arg Leu Val Leu Lys Ala Lys 55 Asp Ile Arg His Glu Val Val Asn Ile Asn Leu Arg Asn Lys Pro Glu 70 Trp Tyr Tyr Thr Lys His Pro Phe Gly His Ile Pro Val Leu Glu Thr 85 90 Ser Gln Cys Gln Leu Ile Tyr Glu Ser Val Ile Ala Cys Glu Tyr Leu 105 Asp Asp Ala Tyr Pro Gly Arg Lys Leu Phe Pro Tyr Asp Pro Tyr Glu 120 Arg Ala Arg Gln Lys Met Leu Leu Glu Leu Phe Cys Lys Val Pro His 135 140 Leu Thr Lys Glu Cys Leu Val Ala Leu Arg Cys Gly Arg Glu Cys Thr 150 155 Asn Leu Lys Ala Ala Leu Arg Gln Glu Phe Ser Asn Leu Glu Glu Ile 165 170 Leu Glu Tyr Gln Asn Thr Thr Phe Phe Gly Gly Thr Cys Ile Ser Met 185 Ile Asp Tyr Leu Leu Trp Pro Trp Phe Glu Arg Leu Asp Val Tyr Gly 200 Ile Leu Asp Cys Val Ser His Thr Pro Ala Leu Arg Leu Trp Ile Ser 210

<210> 1314 <211> 173 <212>Amino acid <213> Homo sapiens

<400> 1314 Asn Thr Ala Thr Asn Met Thr Gln Pro Asn Ala Gly Thr Arg Lys Tyr 5 10 Ser Val Pro Ala Ile Ser Val His Thr Ser Ser Ser Phe Ala Tyr 2.5 Asp Arg Glu Phe Leu Arg Thr Leu Pro Gly Phe Leu Ile Val Ala Glu 40 Ile Val Leu Gly Leu Leu Val Trp Thr Leu Ile Ala Gly Thr Glu Tyr Phe Arg Val Pro Ala Phe Gly Trp Val Met Phe Val Ala Val Phe Tyr 70 75 Trp Val Leu Thr Val Phe Phe Leu Ile Ile Tyr Ile Thr Met Thr Tyr 85 Thr Arg Ile Pro Gln Val Pro Trp Thr Thr Val Gly Leu Cys Phe Asn 105 Gly Ser Ala Phe Val Leu Tyr Leu Ser Ala Ala Val Val Asp Ala Ser 120 Ser Val Ser Pro Glu Arg Asp Ser His Asn Phe Asn Ser Trp Ala Ala . 140 135 Ser Ser Phe Phe Ala Phe Leu Val Thr Ile Cys Tyr Ala Gly Asn Thr 150 155 Tyr Phe Ser Phe Ile Ala Trp Arg Ser Arg Thr Ile Gln 170

<210> 1315 <211> 259 <212>Amino acid <213> Homo sapiens

Ser Tyr Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Tyr Arg Glu 100 105 Arg Arg Tyr Gly Phe Thr Arg Arg Tyr Tyr Arg Ser Pro Ser Arg Tyr 120 Arg Ser Arg Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys 135 140 Gly Arg Ala Tyr Ala Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly 150 155 Arg Thr Val Tyr Pro Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg 165 170 Thr Arg Ser Arg Ser Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg 185 Met Glu Leu Glu Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly 200 Thr Thr Asn Ile Asp Leu Pro Ala Ser Leu Arg Thr Val Pro Ser Ala 215 220 Lys Glu Thr Ser Arg Gly Ile Gly Val Ser Ser Asn Gly Ala Lys Pro 230 235 Glu Val Ser Ile Leu Gly Leu Ser Glu Gln Asn Phe Gln Lys Ala Asn 245 Cys Gln Ile 259

<210> 1316 <211> 678 <212>Amino acid <213> Homo sapiens

<400> 1316 Ala Glu Gly Ser Thr Met Asp Leu Thr Lys Met Gly Met Ile Gln Leu Gln Asn Pro Asn His Pro Thr Gly Leu Leu Cys Lys Ala Asn Gln Met Arg Leu Ala Gly Thr Leu Cys Asp Val Val Ile Met Val Asp Ser Gln 40 Glu Phe His Ala His Arg Thr Val Leu Ala Cys Thr Ser Lys Met Phe 55 Glu Ile Leu Phe His Arg Asn Ser Gln His Tyr Thr Leu Asp Phe Leu 70 Ser Pro Lys Thr Phe Gln Gln Ile Leu Glu Tyr Ala Tyr Thr Ala Thr 85 90 Leu Gln Ala Lys Ala Glu Asp Leu Asp Asp Leu Leu Tyr Ala Ala Glu 105 Ile Leu Glu Ile Glu Tyr Leu Glu Glu Gln Cys Leu Lys Met Leu Glu 120 125 Thr Ile Gln Ala Ser Asp Asp Asn Asp Thr Glu Ala Thr Met Ala Asp 135 140 Gly Gly Ala Glu Glu Lys Lys Asp Arg Lys Ala Arg Tyr Leu Lys Asn 150 155 Ile Phe Ile Ser Lys His Ser Ser Glu Glu Ser Gly Tyr Ala Ser Val 170 Ala Gly Gln Ser Leu Pro Gly Pro Met Val Asp Gln Ser Pro Ser Val 185 Ser Thr Ser Phe Gly Leu Ser Ala Met Ser Pro Thr Lys Ala Ala Val 200 205 Asp Ser Leu Met Thr Ile Gly Gln Ser Leu Leu Gln Gly Thr Leu Gln 215 220 Pro Pro Ala Gly Pro Glu Glu Pro Thr Leu Ala Gly Gly Gly Arg His 230

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Pro Gly Val Ala Glu Val Lys Thr Glu Met Met Gln Val Asp Glu Val
                 245
                                    250
 Pro Ser Gln Asp Ser Pro Gly Ala Ala Glu Ser Ser Ile Ser Gly Gly
                                265
 Met Gly Asp Lys Val Glu Glu Arg Gly Lys Glu Gly Pro Gly Thr Pro
                            280
 Thr Arg Ser Ser Val Ile Thr Ser Ala Arg Glu Leu His Tyr Gly Arg
                        295
 Glu Glu Ser Ala Glu Gln Val Pro Pro Pro Ala Glu Ala Gly Gln Ala
                    310
                                       315
 Pro Thr Gly Arg Pro Glu His Pro Ala Pro Pro Pro Glu Lys His Leu
                325
                                    330
Gly Ile Tyr Ser Val Leu Pro Asn His Lys Ala Asp Ala Val Leu Ser
                                345
Met Pro Ser Ser Val Thr Ser Gly Leu His Val Gln Pro Ala Leu Ala
                            360
Val Ser Met Asp Phe Ser Thr Tyr Gly Gly Leu Leu Pro Gln Gly Phe
                        375
Ile Gln Arg Glu Leu Phe Ser Lys Leu Gly Glu Leu Ala Val Gly Met
                                        395
Lys Ser Glu Ser Arg Thr Ile Gly Glu Gln Cys Ser Val Cys Gly Val
                405
                                    410
Glu Leu Pro Asp Asn Glu Ala Val Glu Gln His Arg Lys Leu His Ser
            420
                               425
Gly Met Lys Thr Tyr Gly Cys Glu Leu Cys Gly Lys Arg Phe Leu Asp
       435
                           440
Ser Leu Arg Leu Arg Met His Leu Leu Ala His Ser Ala Gly Ala Lys
                       455
Ala Phe Val Cys Asp Gln Cys Gly Ala Gln Phe Ser Lys Glu Asp Ala
                   470
Leu Glu Thr His Arg Gln Thr His Thr Gly Thr Asp Met Ala Val Phe
               485
                                   490
Cys Leu Leu Cys Gly Lys Arg Phe Gln Ala Gln Ser Ala Leu Gln Gln
                                505
His Met Glu Val His Ala Gly Val Arg Ser Tyr Ile Cys Ser Glu Cys
                           520
                                              525
Asn Arg Thr Phe Pro Ser His Thr Ala Leu Lys Arg His Leu Arg Ser
                        535
                                           540
His Thr Gly Asp His Pro Tyr Glu Cys Glu Phe Cys Gly Ser Cys Phe
                    550
                                       555
Arg Asp Glu Ser Thr Leu Lys Ser His Lys Arg Ile His Thr Gly Glu
               565
                                    570
Lys Pro Tyr Glu Cys Asn Gly Cys Gly Lys Lys Phe Ser Leu Lys His
                               585
Gln Leu Glu Thr His Tyr Arg Val His Thr Gly Glu Lys Pro Phe Glu
                           600
Cys Lys Leu Cys His Gln Arg Ser Arg Asp Tyr Ser Ala Met Ile Lys
                       615
His Leu Arg Thr His Asn Gly Ala Ser Pro Tyr Gln Cys Thr Ile Cys
                   630
                                       635
Thr Glu Tyr Cys Pro Ser Leu Ser Ser Met Gln Lys His Met Lys Gly
                                  650
His Lys Pro Glu Glu Ile Pro Pro Asp Trp Arg Ile Glu Lys Thr Tyr
          660
                               665
Leu Tyr Leu Cys Tyr Val
       675 678
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<210> 1317 <211> 74 <212>Amino acid <213> Homo sapiens

<210> 1318 <211> 351 <212>Amino acid <213> Homo sapiens

<400> 1318 Ala Ser Gly Ser Pro Ala Pro Ser Ser Ser Ser Ala Met Ala Ala Ala 10 Cys Gly Pro Gly Ala Ala Gly Tyr Cys Leu Leu Leu Gly Leu His Leu 25 Phe Leu Leu Thr Ala Gly Pro Ala Leu Gly Trp Asn Asp Pro Asp Arg Met Leu Leu Arg Asp Val Lys Ala Leu Thr Leu His Tyr Asp Arg Tyr 55 Thr Thr Ser Arg Arg Leu Asp Pro Ile Pro Gln Leu Lys Cys Val Gly 70 75 Gly Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys Val Ile Gln Cys Gln 85 . 90 Asn Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp Glu Cys Lys Thr Asp 105 Leu Asp Ile Ala Tyr Lys Phe Gly Lys Thr Val Val Ser Cys Glu Gly 120 125 Tyr Glu Ser Ser Glu Asp Gln Tyr Val Leu Arg Gly Ser Cys Gly Leu 135 140 Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu Gln Lys Leu Lys Glu 150 155 Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser Asp Tyr Tyr Lys 165 170 175 Trp Ser Ser Ala Asp Ser Cys Asn Met Ser Gly Leu Ile Thr Ile Val 185 Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys Leu Phe Leu Ser Asp 200 Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr Pro Pro Phe Ser His 215 220 Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro Pro Pro Pro Gly Phe 230 235 Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly His Gly Ala Thr Ser 245 250 Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly Tyr Glu Asn Ser Gly 265 Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly Ile Leu Gly Tyr Leu 280 Phe Gly Ser Asn Arg Ala Ala Thr Pro Phe Ser Asp Ser Trp Tyr Tyr 290

<210> 1319 <211> 310 <212>Amino acid <213> Homo sapiens

<400> 1319 Gly Arg Cys Gly Ala Met Ala Ala Gly Leu Ala Arg Leu Leu Leu Leu Gly Leu Ser Ala Gly Gly Pro Ala Pro Ala Gly Ala Ala Lys Met 25 Lys Val Val Glu Glu Pro Asn Ala Phe Gly Val Asn Asn Pro Phe Leu 40 Pro Gln Ala Ser Arg Leu Gln Ala Lys Arg Asp Pro Ser Pro Val Ser 55 Gly Pro Val His Leu Phe Arg Leu Ser Gly Lys Cys Phe Ser Leu Val 75 Glu Ser Thr Tyr Lys Tyr Glu Phe Cys Pro Phe His Asn Val Thr Gln 90 His Glu Gln Thr Phe Arg Trp Asn Ala Tyr Ser Gly Ile Leu Gly Ile 100 105 Trp His Glu Trp Glu Ile Ala Asn Asn Thr Phe Thr Gly Met Trp Met 120 125 Arg Asp Gly Asp Ala Cys Arg Ser Arg Ser Arg Gln Ser Lys Val Glu 135 140 Leu Ala Cys Gly Lys Ser Asn Arg Leu Ala His Val Ser Glu Pro Ser 150 155 Thr Cys Val Tyr Ala Leu Thr Phe Glu Thr Pro Leu Val Cys His Pro 165 170 His Ala Leu Leu Val Tyr Pro Thr Leu Pro Glu Ala Leu Gln Arg Gln 185 Trp Asp Gln Val Glu Gln Asp Leu Ala Asp Glu Leu Ile Thr Pro Gln 200 Gly His Glu Lys Leu Leu Arg Thr Leu Phe Glu Asp Ala Gly Tyr Leu 215 220 Lys Thr Pro Glu Glu Asn Glu Pro Thr Gln Leu Glu Gly Gly Pro Asp 230 235 Ser Leu Gly Phe Glu Thr Leu Glu Asn Cys Arg Lys Ala His Lys Glu 245 250 Leu Ser Lys Glu Ile Lys Arg Leu Lys Gly Leu Leu Thr Gln His Gly 260 265 Ile Pro Tyr Thr Arg Pro Thr Glu Thr Ser Asn Leu Glu His Leu Gly 280 His Glu Thr Pro Arg Ala Lys Ser Pro Glu Gln Leu Arg Gly Asp Pro Gly Leu Arg Gly Ser Leu 305 310

<210> 1320 <211> 313 <212>Amino acid <213> Homo sapiens

<400> 1320 Asn Ser Phe Trp Ser Val Leu Phe Leu Val Gln Glu Glu Thr Glu Val 10 Ala Arg Cys Asn Ala Gln His Arg Leu Arg Gln Ser Arg Asp Ser Lys 25 Pro Asp Pro Ser Phe Arg Ser Gln Pro Ile Asp Ser Ser Ile Ser Phe 40 Ala Gly Ser Asp Ile Gln Pro Leu Phe Ser Phe Ala Ser Val Asp Gly 55 60 Thr Gln Val Gly Glu Ala Glu Glu Trp Ala Gly Pro Trp Ala Glu Ala 70 75 Thr Leu Leu Pro Gly Pro Gly Asn Arg Trp Pro Pro Arg Ala Gly Leu 90 Ser Gly Asn Trp Leu Glu Glu Asp Gly Asp Trp Pro Ser Leu Pro Glu 100 105 Val Val Gly Phe Val Ser Glu Arg Glu Leu Phe Arg Asp Ala Leu Gly 120 125 Ala Gly Cys Arg Ile Leu Leu Ile Cys Glu Met Gln Leu Thr His Gln 135 140 Leu Asp Leu Phe Pro Glu Cys Arg Val Thr Leu Leu Leu Phe Lys Asp 150 155 Val Lys Asn Ala Gly Asp Leu Arg Arg Lys Ala Met Glu Gly Thr Ile 170 Asp Gly Ser Leu Ile Asn Pro Thr Val Ile Val Asp Pro Phe Gln Ile 180 185 Leu Val Ala Ala Asn Lys Ala Val His Leu Tyr Lys Leu Gly Lys Met 200 Lys Thr Arg Thr Leu Ser Thr Glu Ile Ile Phe Asn Leu Ser Pro Asn 215 Asn Asn Ile Ser Glu Ala Leu Lys Lys Phe Gly Ile Ser Ala Asn Asp 230 235 Thr Ser Ile Leu Ile Val Tyr Ile Glu Glu Gly Glu Lys Gln Ile Asn 245 250 Gln Glu Tyr Leu Ile Ser Gln Val Glu Gly His Gln Val Ser Leu Lys 265 Asn Leu Pro Glu Ile Met Asn Ile Thr Glu Val Lys Lys Ile Tyr Lys 280 285 Leu Ser Ser Gln Glu Glu Ser Ile Gly Thr Leu Leu Asp Ala Ile Ile 295 Cys Arg Met Ser Thr Lys Asp Val Leu 310

<210> 1321 <211> 891 <212>Amino acid <213> Homo sapiens

Ala Thr Thr Ala Thr Gly Asn Arg Leu Trp Pro Gly Leu Leu Ile Met 55 Leu Gly Ser Leu Cys His Arg Gly Ser Pro Cys Gly Leu Ser Thr His 70 Ile Glu Ile Gly His Arg Ala Leu Glu Phe Leu Gln Leu His Asn Gly 90 Arg Val Asn Tyr Arg Glu Leu Leu Glu His Gln Asp Ala Tyr Gln 100 105 Ala Gly Ile Val Phe Pro Asp Cys Phe Tyr Pro Ser Ile Cys Lys Gly 120 Gly Lys Phe His Asp Val Ser Glu Ser Thr His Trp Thr Pro Phe Leu 135 Asn Ala Ser Val His Tyr Ile Arg Glu Asn Tyr Pro Leu Pro Trp Glu 150 155 Lys Asp Thr Glu Lys Leu Val Ala Phe Leu Phe Gly Ile Thr Ser His 170 Met Ala Ala Asp Val Ser Trp His Ser Leu Gly Leu Glu Gln Gly Phe 185 Leu Arg Thr Met Gly Ala Ile Asp Phe His Gly Ser Tyr Ser Glu Ala 200 His Ser Ala Gly Asp Phe Gly Gly Asp Val Leu Ser Gln Phe Glu Phe 215 220 Asn Phe Asn Tyr Leu Ala Arg Arg Trp Tyr Val Pro Val Lys Asp Leu 230 235 Leu Gly Ile Tyr Glu Lys Leu Tyr Gly Arg Lys Val Ile Thr Glu Asn 245 250 Val Ile Val Asp Cys Ser His Ile Gln Phe Leu Glu Met Tyr Gly Glu 260 265 Met Leu Ala Val Ser Lys Leu Tyr Pro Thr Tyr Ser Thr Lys Ser Pro 280 Phe Leu Val Glu Gln Phe Gln Glu Tyr Phe Leu Gly Gly Leu Asp Asp 295 Met Ala Phe Trp Ser Thr Asn Ile Tyr His Leu Thr Ile Phe Met Leu 310 315 Glu Asn Gly Thr Ser Asp Cys Asn Leu Pro Glu Asn Pro Leu Phe Ile 330 Ala Cys Gly Gly Gln Gln Asn His Thr Gln Gly Ser Lys Met Gln Lys 340 345 Asn Asp Phe His Arg Asn Leu Thr Thr Ser Leu Thr Glu Ser Val Asp 360 365 Arg Asn Ile Asn Tyr Thr Glu Arg Gly Val Phe Phe Ser Val Asn Ser 375 380 Trp Thr Pro Asp Ser Met Ser Phe Ile Tyr Lys Ala Leu Glu Arg Asn 390 395 Ile Arg Thr Met Phe Ile Gly Gly Ser Gln Leu Ser Gln Lys His Val 410 Ser Ser Pro Leu Ala Ser Tyr Phe Leu Ser Phe Pro Tyr Ala Arg Leu 425 Gly Trp Ala Met Thr Ser Ala Asp Leu Asn Gln Asp Gly His Gly Asp 440 Leu Val Val Gly Ala Pro Gly Tyr Ser Arg Pro Gly His Ile His Ile 455 Gly Arg Val Tyr Leu Ile Tyr Gly Asn Asp Leu Gly Leu Pro Pro Val 470 475 Asp Leu Asp Leu Asp Lys Glu Ala His Arg Ile Leu Glu Gly Phe Gln 490 Pro Ser Gly Arg Phe Gly Ser Ala Leu Ala Val Leu Asp Phe Asn Val 505 Asp Gly Val Pro Asp Leu Ala Val Gly Ala Pro Ser Val Gly Ser Glu 520 Gln Leu Thr Tyr Lys Gly Ala Val Tyr Val Tyr Phe Gly Ser Lys Gln 535 540 Gly Gly Met Ser Ser Pro Asn Ile Thr Ile Ser Cys Gln Asp Ile 550 555

Tyr Cys Asn Leu Gly Trp Thr Leu Leu Ala Ala Asp Val Asn Gly Asp 570 Ser Glu Pro Asp Leu Val Ile Gly Ser Pro Phe Ala Pro Gly Gly Gly 585 Lys Gln Lys Gly Ile Val Ala Ala Phe Tyr Ser Gly Pro Ser Leu Ser 595 600 Asp Lys Glu Lys Leu Asn Val Glu Ala Ala Asn Trp Thr Val Arg Gly 615 Glu Glu Asp Phe Ser Trp Phe Gly Tyr Ser Leu His Gly Val Thr Val 630 635 Asp Asn Arg Thr Leu Leu Leu Val Gly Ser Pro Thr Trp Lys Asn Ala 645 650 Ser Arg Leu Gly His Leu Leu His Ile Arg Asp Glu Lys Lys Ser Leu 660 665 Gly Arg Val Tyr Gly Tyr Phe Pro Pro Asn Gly Gln Ser Trp Phe Thr 680 Ile Ser Gly Asp Lys Ala Met Gly Lys Leu Gly Thr Ser Leu Ser Ser 695 700 Gly His Val Leu Met Asn Gly Thr Leu Lys Gln Val Leu Leu Val Gly 710 715 Ala Pro Thr Tyr Asp Asp Val Ser Lys Val Ala Phe Leu Thr Val Thr 725 730 Leu His Gln Gly Gly Ala Thr Arg Met Tyr Ala Leu Thr Ser Asp Ala 745 Gln Pro Leu Leu Ser Thr Phe Ser Gly Asp Arg Arg Phe Ser Arg 760 765 Phe Gly Gly Val Leu His Leu Ser Asp Leu Asp Asp Asp Gly Leu Asp 775 780 Glu Ile Ile Met Ala Ala Pro Leu Arg Ile Ala Asp Val Thr Ser Gly 790 795 Leu Ile Gly Gly Glu Asp Gly Arg Val Tyr Val Tyr Asn Gly Lys Glu 805 810 Thr Thr Leu Gly Asp Met Thr Gly Lys Cys Lys Ser Trp Ile Thr Pro 825 Cys Pro Glu Glu Lys Ala Gln Tyr Val Leu Ile Ser Pro Glu Ala Ser 840 Ser Arg Phe Gly Ser Ser Leu Ile Thr Val Arg Ser Lys Ala Lys Asn 855 860 Gln Val Val Ile Ala Ala Gly Arg Ser Ser Leu Gly Ala Arg Leu Ser 870 875 Gly Ala Leu His Val Tyr Ser Leu Gly Ser Asp 890 891

<210> 1322 <211> 119 <212>Amino acid <213> Homo sapiens

<400> 1322

 Ser Leu Arg
 Arg Asn
 Ser Ala
 Arg Gly
 Leu Lys
 Met Ala
 Arg
 Arg
 Arg
 Ile
 Asn
 Gln
 Pro
 Val
 Ala
 Phe

 Val
 Arg
 Arg
 Ile
 Pro
 Trp
 Thr
 Ala
 Ala
 Ser
 Ser
 Gln
 Leu
 Lys
 Glu
 His

 Phe
 Ala
 Gln
 Phe
 Gly
 His
 Val
 Arg
 Arg
 Cys
 Ile
 Leu
 Pro
 Phe
 Asp
 Lys

 Glu
 Thr
 Gly
 Phe
 His
 Arg
 Gly
 Leu
 Gly
 Trp
 Val
 Gln
 Phe
 Ser
 Ser
 Glu

<210> 1323 <211> 257 <212>Amino acid <213> Homo sapiens

<400> '1323 Gly Ser Ser Asn Ile His Ser Ala Ser Thr His Gly Phe Cys His Trp 10 Phe Ser Ser Pro Ser Thr Leu Lys Arg Gln Lys Gln Ala Ile Arg Phe 25 Gln Lys Ile Arg Arg Gln Met Glu Ala Pro Gly Ala Pro Pro Arg Thr 40 Leu Thr Trp Glu Ala Met Glu Gln Ile Arg Tyr Leu His Glu Glu Phe 55 Pro Glu Ser Trp Ser Val Pro Arg Leu Ala Glu Gly Phe Asp Val Ser 70 75 Thr Asp Val Ile Arg Arg Val Leu Lys Ser Lys Phe Leu Pro Thr Leu 85 90 Glu Gln Lys Leu Lys Gln Asp Gln Lys Val Leu Lys Lys Ala Gly Leu 105 Ala His Ser Leu Gln His Leu Arg Gly Ser Gly Asn Thr Ser Lys Leu 120 125 Leu Pro Ala Gly His Ser Val Ser Gly Ser Leu Leu Met Pro Gly His 135 140 Glu Ala Ser Ser Lys Asp Pro Asn His Ser Thr Ala Leu Lys Val Ile 150 155 Glu Ser Asp Thr His Arg Thr Asn Thr Pro Arg Arg Arg Lys Gly Arg 165 170 Asn Lys Glu Ile Gln Asp Leu Glu Glu Ser Phe Val Pro Val Ala Ala 180 185 Pro Leu Gly His Pro Arg Glu Leu Gln Lys Tyr Ser Ser Asp Ser Glu 195 200 Ser Pro Arg Gly Thr Gly Ser Gly Ala Leu Pro Ser Gly Gln Lys Leu 215 220 Glu Glu Leu Lys Ala Glu Glu Pro Asp Asn Phe Ser Ser Lys Val Val 230 235 240 Gln Arg Gly Arg Glu Phe Phe Asp Ser Asn Gly Asn Phe Leu Tyr Arg 250 Ile 257

<210> 1324 <211> 273 <212>Amino acid <213> Homo sapiens

<400> 1324

Glu Thr Arg Val Lys Thr Ser Leu Glu Leu Leu Arg Thr Gln Leu Glu Pro Thr Gly Thr Val Gly Asn Thr Ile Met Thr Ser Gln Pro Val Pro 25 Asn Glu Thr Ile Ile Val Leu Pro Ser Asn Val Ile Asn Phe Ser Gln 40 Ala Glu Lys Pro Glu Pro Thr Asn Gln Gly Gln Asp Ser Leu Lys Lys 55 His Leu His Ala Glu Ile Lys Val Ile Gly Thr Ile Gln Ile Leu Cys 75 Gly Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe 90 Ser Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr 100 105 Pro Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile 120 Ala Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val 135 Gly Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu 150 155 Ser Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu 165 170 Asp Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His 185 Asp Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala 200 Gly Thr Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu 215 Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe 230 235 Pro Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly 250 Met Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr 265 Ser 273

<210> 1325 <211> 477 <212>Amino acid <213> Homo sapiens

<400> 1325 Glu Met Val Gly Ala Met Trp Lys Val Ile Val Ser Leu Val Leu Leu 10 Met Pro Gly Pro Cys Asp Gly Leu Phe Arg Ser Leu Tyr Arg Ser Val 25 Ser Met Pro Pro Lys Gly Asp Ser Gly Gln Pro Leu Phe Leu Thr Pro Tyr Ile Glu Ala Gly Lys Ile Gln Lys Gly Arg Glu Leu Ser Leu Val 55 60 Gly Pro Phe Pro Gly Leu Asn Met Lys Ser Tyr Ala Gly Phe Leu Thr Val Asn Lys Thr Tyr Asn Ser Asn Leu Phe Phe Trp Phe Phe Pro Ala 90 Gln Ile Gln Pro Glu Asp Ala Pro Val Val Leu Trp Leu Gln Gly Gly 105 Pro Gly Gly Ser Ser Met Phe Gly Leu Phe Val Glu His Gly Pro Tyr 120

Val Val Thr Ser Asn Met Thr Leu Arg Asp Arg Asp Phe Pro Trp Thr 135 140 Thr Thr Leu Ser Met Leu Tyr Ile Asp Asn Pro Val Gly Thr Gly Phe 150 Ser Phe Thr Asp Asp Thr His Gly Tyr Ala Val Asn Glu Asp Asp Val 165 170 175 Ala Arg Asp Leu Tyr Ser Ala Leu Ile Gln Phe Phe Gln Ile Phe Pro 185 Glu Tyr Lys Asn Asn Asp Phe Tyr Val Thr Gly Glu Ser Tyr Ala Gly 200 Lys Tyr Val Pro Ala Ile Ala His Leu Ile His Ser Leu Asn Pro Val 215 Arg Glu Val Lys Ile Asn Leu Asn Gly Ile Ala Ile Gly Asp Gly Tyr 230 235 Ser Asp Pro Glu Ser Ile Ile Gly Gly Tyr Ala Glu Phe Leu Tyr Gln 245 250 Ile Gly Leu Leu Asp Glu Lys Gln Lys Lys Tyr Phe Gln Lys Gln Cys 265 His Glu Cys Ile Glu His Ile Arg Lys Gln Asn Trp Phe Glu Ala Phe 280 Glu Ile Leu Asp Lys Leu Leu Asp Gly Asp Leu Thr Ser Asp Pro Ser 295 300 Tyr Phe Gln Asn Val Thr Gly Cys Ser Asn Tyr Tyr Asn Phe Leu Arg 310 315 Cys Thr Glu Pro Glu Asp Gln Leu Tyr Tyr Val Lys Phe Leu Ser Leu 330 Pro Glu Val Arg Gln Ala Ile His Val Gly Asn Gln Thr Phe Asn Asp 345 Gly Thr Ile Val Glu Lys Tyr Leu Arg Glu Asp Thr Val Gln Ser Val 360 Lys Pro Trp Leu Thr Glu Ile Met Asn Asn Tyr Lys Val Leu Ile Tyr 375 Asn Gly Gln Leu Asp Ile Ile Val Ala Ala Ala Leu Thr Glu Arg Ser 390 395 Leu Met Gly Met Asp Trp Lys Gly Ser Gln Glu Tyr Lys Lys Ala Glu 405 410 Lys Lys Val Trp Lys Ile Phe Lys Ser Asp Ser Glu Val Ala Gly Tyr 420 425 Ile Arg Gln Ala Gly Asp Phe His Gln Val Ile Ile Arg Gly Gly 440 445 His Ile Leu Pro Tyr Asp Gln Pro Leu Arg Ala Phe Asp Met Ile Asn 455 Arg Phe Ile Tyr Gly Lys Gly Trp Asp Pro Tyr Val Gly 470

<210> 1326 <211> 160 <212>Amino acid <213> Homo sapiens

<400> 1326

Leu Asn Lys Trp Val Ile Pro Glu Leu Ile Gly His Thr Ile Val Thr 75 Val Leu Leu Met Ser Leu His Trp Phe Ile Phe Leu Leu Asn Leu 90 Pro Val Ala Thr Trp Asn I'le Tyr Arg Tyr Ile Met Val Pro Ser Gly 100 105 Asn Met Gly Val Phe Asp Pro Thr Glu Ile His Asn Arg Gly Gln Leu 115 120 125 Lys Ser His Met Lys Glu Ala Met Ile Lys Leu Gly Phe His Leu Leu 135 140 Cys Phe Phe Met Tyr Leu Tyr Ser Met Ile Leu Ala Leu Ile Asn Asp 150 155

<210> 1327 <211> 131 <212>Amino acid <213> Homo sapiens

<400> 1327 Gln Ser Pro Gly His Gly Ala Pro Cys Gln Leu Ser Ser Ser His Ser 10 Arg Ser Asn Arg Leu Leu Ser Pro Met Ala Arg Ala Thr Leu Ser Ala 20 Ala Pro Ser Asn Pro Arg Leu Leu Arg Val Ala Leu Leu Leu Leu 40 Leu Val Ala Ala Ser Arg Arg Ala Ala Gly Ala Pro Leu Ala Thr Glu 55 Leu Arg Cys Gln Cys Leu Gln Thr Leu Gln Gly Ile His Leu Lys Asn 70 75 Ile Gln Ser Val Lys Val Lys Ser Pro Gly Pro His Cys Ala Gln Thr 85 90 Glu Val Ile Ala Thr Leu Lys Asn Gly Gln Lys Ala Cys Leu Asn Pro 105 Ala Ser Pro Met Val Lys Lys Ile Ile Glu Lys Met Leu Lys Asn Gly Lys Ser Asn 130 131

<210> 1328 <211> 44 <212>Amino acid <213> Homo sapiens

<210> 1329 <211> 525 <212>Amino acid <213> Homo sapiens

<400> 1329 Cys Thr Pro Val Ala Arg Ser Met Ala Thr Thr Ala Thr Cys Thr Arg 10 Phe Thr Asp Asp Tyr Gln Leu Phe Glu Glu Leu Gly Lys Gly Ala Phe 25 Ser Val Val Arg Arg Cys Val Lys Lys Thr Ser Thr Gln Glu Tyr Ala 40 Ala Lys Ile Ile Asn Thr Lys Lys Leu Ser Ala Arg Asp His Gln Lys 55 Leu Glu Arg Glu Ala Arg Ile Cys Arg Leu Leu Lys His Pro Asn Ile 70 75 Val Arg Leu His Asp Ser Ile Ser Glu Glu Gly Phe His Tyr Leu Val 85 90 Phe Asp Leu Val Thr Gly Gly Glu Leu Phe Glu Asp Ile Val Ala Arg 100 105 Glu Tyr Tyr Ser Glu Ala Asp Ala Ser His Cys Ile His Gln Ile Leu 120 Glu Ser Val Asn His Ile His Gln His Asp Ile Val His Arg Asp Leu 135 Lys Pro Glu Asn Leu Leu Leu Ala Ser Lys Cys Lys Gly Ala Ala Val 150 155 Lys Leu Ala Asp Phe Gly Leu Ala Ile Glu Val Gln Gly Glu Gln Gln 165 170 Ala Trp Phe Gly Phe Ala Gly Thr Pro Gly Tyr Leu Ser Pro Glu Val 185 Leu Arg Lys Asp Pro Tyr Gly Lys Pro Val Asp Ile Trp Ala Cys Gly 200 Val Ile Leu Tyr Ile Leu Leu Val Gly Tyr Pro Pro Phe Trp Asp Glu 215 220 Asp Gln His Lys Leu Tyr Gln Gln Ile Lys Ala Gly Ala Tyr Asp Phe 230 235 Pro Ser Pro Glu Trp Asp Thr Val Thr Pro Glu Ala Lys Asn Leu Ile 245 250 Asn Gln Met Leu Thr Ile Asn Pro Ala Lys Arg Ile Thr Ala Asp Gln 265 Ala Leu Lys His Pro Trp Val Cys Gln Arg Ser Thr Val Ala Ser Met 280 285 Met His Arg Gln Glu Thr Val Glu Cys Leu Arg Lys Phe Asn Ala Arg 295 300 Arg Lys Leu Lys Gly Ala Ile Leu Thr Thr Met Leu Val Ser Arg Asn 310 315 Phe Ser Ala Ala Lys Ser Leu Leu Asn Lys Lys Ser Asp Gly Gly Val 330 Lys Pro Gln Ser Asn Asn Lys Asn Ser Leu Val Ser Pro Ala Gln Glu 340 345 Pro Ala Pro Leu Gln Thr Ala Met Glu Pro Gln Thr Thr Val Val His 360 Asn Ala Thr Asp Gly Ile Lys Gly Ser Thr Glu Ser Cys Asn Thr Thr 375 380 Thr Glu Asp Glu Asp Leu Lys Val Arg Lys Gln Glu Ile Ile Lys Ile 390 395 Thr Glu Gln Leu Ile Glu Ala Ile Asn Asn Gly Asp Phe Glu Ala Tyr 405 410 Thr Lys Ile Cys Asp Pro Gly Leu Thr Ser Phe Glu Pro Glu Ala Leu 420

<210> 1330 <211> 205 <212>Amino acid <213> Homo sapiens

<400> 1330 Asn Arg Arg Thr Val Lys Met Leu Leu Glu Leu Ser Glu Glu His Lys 10 Glu His Leu Ala Phe Leu Pro Gln Val Asp Ser Ala Val Val Ala Glu 25 Phe Gly Arg Ile Ala Val Glu Phe Leu Arg Arg Gly Ala Asn Pro Lys 40 Ile Tyr Glu Gly Ala Ala Arg Lys Leu Asn Val Ser Ser Asp Thr Val 5.5 Gln His Gly Val Glu Gly Leu Thr Tyr Leu Leu Thr Glu Ser Ser Lys 75 Leu Met Ile Ser Glu Leu Asp Phe Gln Asp Ser Val Phe Val Leu Gly Phe Ser Glu Glu Leu Asn Lys Leu Leu Leu Gln Leu Tyr Leu Asp Asn 105 Arg Lys Glu Ile Arg Thr Ile Leu Ser Glu Leu Ala Pro Ser Leu Pro 115 120 Ser Tyr His Asn Leu Glu Trp Arg Leu Asp Val Gln Leu Ala Ser Arg 135 Ser Leu Arg Gln Gln Ile Lys Pro Ala Val Thr Ile Lys Leu His Leu 150 155 Asn Gln Asn Gly Asp His Asn Thr Lys Val Leu Gln Thr Asp Pro Ala 170 Thr Leu Leu His Leu Val Gln Gln Leu Glu Gln Ala Leu Glu Glu Met 185 190 Lys Thr Asn His Cys Arg Arg Val Val Arg Asn Ile Lys

<210> 1331 <211> 78 <212>Amino acid <213> Homo sapiens

<400> 1331
Gly Thr Ser Ile Tyr Leu Ala His Arg Val Ala Arg Ala Trp Glu Leu
1 5 10 15

<210> 1332 <211> 274 <212>Amino acid <213> Homo sapiens

<400> 1332 Arg Gly Cys Gly Ser Cys Gly Tyr Lys Pro Ser Ala Gly Pro Ala Trp 10 Arg Pro Arg Pro Pro Pro Ala Val Ser Pro Leu Arg His Pro Glu Pro 20 25 Ala Lys Val Leu Ser Phe Ser Ser Cys Pro Leu Pro Ala Leu Gly Arg 40 · Thr Gly Pro Ser Arg Ala Ala Arg Ala Gln Ser Leu Thr Met Ala Ser 55 Leu Phe Lys Lys Lys Thr Val Asp Asp Val Ile Lys Glu Gln Asn Arg 70 75 Glu Leu Arg Gly Thr Gln Arg Ala Ile Ile Arg Asp Arg Ala Ala Leu 85 90 Glu Lys Gln Glu Lys Gln Leu Glu Leu Glu Ile Lys Lys Met Ala Lys 105 Ile Gly Asn Lys Glu Ala Cys Lys Val Leu Ala Lys Gln Leu Val His 120 125 Leu Arg Lys Gln Lys Thr Arg Thr Phe Ala Val Ser Ser Lys Val Thr 135 140 Ser Met Ser Thr Gln Thr Lys Val Met Asn Ser Gln Met Lys Met Ala 150 155 Gly Ala Met Ser Thr Thr Ala Lys Thr Met Gln Ala Val Asn Lys Lys 165 170 Met Asp Pro Gln Lys Thr Leu Gln Thr Met Gln Asn Phe Gln Lys Glu 180 185 190 Asn Met Lys Met Glu Met Thr Glu Glu Met Ile Asn Asp Thr Leu Asp 200 Asp Ile Phe Asp Gly Ser Asp Asp Glu Glu Glu Ser Gln Asp Ile Val 215 220 Asn Gln Val Leu Asp Glu Ile Gly Ile Glu Ile Ser Gly Lys Met Ala 230 235 Lys Ala Pro Ser Ala Ala Arg Ser Leu Pro Ser Ala Ser Thr Ser Lys 250 Ala Thr Ile Ser Asp Glu Glu Ile Glu Arg Gln Leu Lys Ala Leu Gly 265 Val Asp 274

<210> 1333 <211> 157 <212>Amino acid <213> Homo sapiens

<400> 1333 Ser Thr Asp Gly Asn Gly Ala Glu Arg Leu Phe Ala Glu Leu Arg Lys 10 Met Asn Ala Arg Gly Leu Gly Ser Glu Leu Lys Asp Ser Ile Pro Val 25 Thr Glu Leu Ser Ala Ser Gly Pro Phe Glu Ser His Asp Leu Leu Arg 40 Lys Gly Phe Ser Cys Val Lys Asn Glu Leu Leu Pro Ser His Pro Leu 55 60 Glu Leu Ser Glu Lys Asn Phe Gln Leu Asn Gln Asp Lys Met Asn Phe 70 75 Ser Thr Leu Arg Asn Ile Gln Gly Leu Phe Ala Pro Leu Lys Leu Gln 85 Met Glu Phe Lys Ala Val Gln Gln Val Gln Arg Leu Pro Phe Leu Ser 100 105 Ser Ser Asn Leu Ser Leu Asp Val Leu Arg Gly Asn Asp Glu Thr Ile 120 125 Gly Phe Glu Asp Ile Leu Asn Asp Pro Ser Gln Ser Glu Val Met Gly 135 140 Glu Pro His Leu Met Val Glu Tyr Lys Leu Gly Leu Leu 150 155

<210> 1334
<211> 193
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(193)
<223> X = any amino acid or stop code

<400> 1334 Arg Asn Met Lys Leu His Tyr Val Ala Val Leu Thr Leu Ala Ile Leu 1 5 10 Met Phe Leu Thr Trp Leu Pro Glu Ser Leu Ser Cys Asn Lys Ala Leu 25 Cys Ala Ser Asp Val Ser Lys Cys Leu Ile Gln Glu Leu Cys Gln Cys 40 Arg Pro Gly Glu Gly Asn Cys Ser Cys Cys Lys Glu Cys Met Leu Cys 55 Leu Gly Ala Leu Trp Asp Glu Cys Cys Asp Cys Val Gly Met Cys Asn 75 Pro Arg Asn Tyr Ser Asp Thr Pro Pro Thr Ser Lys Ser Thr Val Glu 90 Glu Leu His Glu Pro Ile Pro Ser Leu Phe Arg Ala Leu Thr Glu Gly 100 105 Asp Thr Gln Leu Asn Trp Asn Ile Val Ser Phe Pro Val Ala Glu Glu 125 Leu Ser His His Glu Asn Leu Val Ser Phe Leu Glu Thr Val Asn Gln 135 140 Pro His His Gln Asn Val Ser Val Pro Ser Asn Asn Val His Ala Pro 150 Tyr Ser Ser Asp Lys Glu Xaa Leu Pro Thr Val Asp Phe Phe His Ser 170 Ala Pro Ser Cys Gly Leu Ser Met Xaa Ser Ile Ile Phe Phe Glu Glu

180 185 190

Thr 193

> <210> 1335 <211> 179 <212>Amino acid <213> Homo sapiens

<400> 1335 Val Gly Gly Val Pro Thr Trp Leu Glu Gly Cys Gly Ser Gly Asn Pro 10 Ser Pro Arg Ser Gly Gly Gly Pro Gly Ala Arg Leu Thr Leu Pro Ala 25 Leu Gln Met Thr Val His Asn Leu Tyr Leu Phe Asp Arg Asn Gly Val 40 45 Cys Leu His Tyr Ser Glu Trp His Arg Lys Lys Gln Ala Gly Ile Pro 60 Lys Glu Glu Glu Tyr Lys Leu Met Tyr Gly Met Leu Phe Ser Ile Arg 70 75 Ser Phe Val Ser Lys Met Ser Pro Leu Asp Met Lys Asp Gly Phe Leu 85 90 Ala Phe Gln Thr Ser Arg Tyr Lys Leu His Tyr Tyr Glu Thr Pro Thr 105 Gly Ile Lys Val Val Met Asn Thr Asp Leu Gly Val Gly Pro Ile Arg 120 Asp Val Leu His His Ile Tyr Ser Ala Leu Tyr Val Glu Leu Val Val 135 140 Lys Asn Pro Leu Cys Pro Leu Gly Gln Thr Val Gln Ser Glu Leu Phe 150 155 Arg Ser Arg Leu Asp Ser Tyr Val Arg Ser Leu Pro Phe Phe Ser Ala 170 Arg Ala Gly 179

<210> 1336 <211> 236 <212>Amino acid <213> Homo sapiens

100 105 Thr Leu Thr Glu Lys Leu Val Ala Met Thr Met Gly Ser Gly Ala Lys 120 125 Met Lys Thr Ser Ala Ser Val Ser Asp Ile Ile Val Val Ala Lys Arg 135 140 Ile Ser Pro Arg Val Asp Asp Val Val Lys Ser Met Tyr Pro Pro Leu 150 155 Asp Pro Lys Leu Leu Asp Ala Arg Thr Thr Ala Leu Leu Leu Ser Val 165 170 Ser His Leu Val Leu Val Thr Arg Asn Ala Cys His Leu Thr Gly Gly 185 Leu Asp Trp Ile Asp Gln Ser Leu Ser Ala Ala Glu Glu His Leu Glu 200 205 Val Leu Arg Glu Ala Ala Leu Ala Ser Glu Pro Asp Lys Gly Leu Pro 215 Gly Pro Glu Gly Phe Leu Gln Glu Gln Ser Ala Ile 230

<210> 1337 <211> 161 <212>Amino acid <213> Homo sapiens

<400> 1337 Val Gly Met Glu Leu Pro Ala Val Asn Leu Lys Val Ile Leu Leu Gly 5 10 His Trp Leu Leu Thr Trp Gly Cys Ile Val Phe Ser Gly Ser Tyr 20 25 Ala Trp Ala Asn Phe Thr Ile Leu Ala Leu Gly Val Trp Ala Val Ala 40 Gln Arg Asp Ser Ile Asp Ala Ile Ser Met Phe Leu Gly Gly Leu Leu 50 55 Ala Thr Ile Phe Leu Asp Ile Val His Ile Ser Ile Phe Tyr Pro Arg 70 75 Val Ser Leu Thr Asp Thr Gly Arg Phe Gly Val Gly Met Ala Ile Leu 85 90 Ser Leu Leu Lys Pro Leu Ser Cys Cys Phe Val Tyr His Met Tyr 105 Arg Glu Arg Gly Glu Leu Leu Val His Thr Gly Phe Leu Gly Ser 120 Ser Gln Asp Arg Ser Ala Tyr Gln Thr Ile Asp Ser Ala Glu Ala Pro 135 140 Ala Asp Pro Phe Ala Val Pro Glu Gly Arg Ser Gln Asp Ala Arg Gly 150 155 Tyr 161

<210> 1338 <211> 200 <212>Amino acid <213> Homo sapiens

<400> 1338
Pro Ala Ser Arg Pro Leu Leu Gly Pro Asp Thr Gly Ser Val Ala Asn

10 Ile Phe Lys Gly Leu Val Ile Leu Pro Glu Met Ser Leu Val Ile Arq 25 Asn Leu Gln Arg Val Ile Pro Ile Arg Arg Ala Pro Leu Arg Ser Lys 40 Ile Glu Ile Val Arg Arg Ile Leu Gly Val Gln Lys Phe Asp Leu Gly 55 Ile Ile Cys Val Asp Asn Lys Asn Ile Gln His Ile Asn Arg Ile Tyr 70 Arg Asp Arg Asn Val Pro Thr Asp Val Leu Ser Phe Pro Phe His Glu 85 90 His Leu Lys Ala Gly Glu Phe Pro Gln Pro Asp Phe Pro Asp Asp Tyr 105 Asn Leu Gly Asp Ile Phe Leu Gly Val Glu Tyr Ile Phe His Gln Cys 120 Lys Glu Asn Glu Asp Tyr Asn Asp Val Leu Thr Val Thr Ala Thr His 135 140 Gly Leu Cys His Leu Leu Gly Phe Thr His Gly Thr Glu Ala Glu Trp 155 Gln Gln Met Phe Gln Lys Glu Lys Ala Val Leu Asp Glu Leu Gly Arg 170 Arg Thr Gly Thr Arg Leu Gln Pro Leu Thr Pro Gly Pro Leu Pro Glu - 185 Gly Ala Glu Gly Arg Val Pro Phe 195

<210> 1339 <211> 267 <212>Amino acid <213> Homo sapiens

<400> 1339

Leu Arg Asn Ala Leu Asp Val Leu His Arg Glu Val Pro Arg Val Leu 10 Val Asn Leu Val Asp Phe Leu Asn Pro Thr Ile Met Arg Gln Val Phe Leu Gly Asn Pro Asp Lys Cys Pro Val Gln Gln Ala Met Leu Glu Pro Leu Gly Ser Lys Thr Glu Thr Leu Asp Leu Arg Ala Glu Met Pro Ile 55 Thr Cys Pro Thr Gln Asn Glu Pro Phe Leu Arg Thr Pro Arg Asn Ser Asn Tyr Thr Tyr Pro Ile Lys Pro Ala Ile Glu Asn Trp Gly Ser Asp 90 Phe Leu Cys Thr Glu Trp Lys Ala Ser Asn Ser Val Pro Thr Ser Val 105 His Gln Leu Arg Pro Ala Asp Ile Lys Val Val Ala Ala Leu Gly Asp 120 Ser Leu Thr Thr Ala Val Gly Ala Arg Pro Asn Asn Ser Ser Asp Leu 135 140 Pro Thr Ser Trp Arg Gly Leu Ser Trp Ser Ile Gly Gly Asp Gly Asn 150 155 Leu Glu Thr His Thr Thr Leu Pro Asn Ile Leu Lys Lys Phe Asn Pro 165 170 Tyr Leu Leu Gly Phe Ser Thr Ser Thr Trp Glu Gly Thr Ala Gly Leu 185 190 Asn Val Ala Ala Glu Gly Ala Arg Ala Arg Asp Met Pro Ala Gln Ala 200 205 Trp Asp Leu Val Glu Arg Met Lys Asn Ser Pro Asp Ile Asn Leu Glu

<210> 1340 <211> 286 <212>Amino acid <213> Homo sapiens

<400> 1340 Val Val Glu Phe Leu Trp Ser Arg Arg Pro Ser Gly Ser Ser Asp Pro Arg Pro Arg Arg Pro Ala Ser Lys Cys Gln Met Met Glu Glu Arg Ala Aşn Leu Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser 40 Ala Leu Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln 55 Gln Phe Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val Lys Lys Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu 90 Leu Val Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val 100 105 Arg Asn Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp 120 Leu Tyr Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val 130 135 Leu Ile Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala 150 155 Leu Met Met Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly 170 Leu Asn Val Leu Asp Ala Asn Leu Cys Leu Lys Gly Glu Asp Leu Asp 185 Ser Gln Val Gly Val Ile Asp Phe Ser Leu Tyr Leu Lys Asp Val Gln 200 Asp Leu Asp Gly Gly Lys Glu His Glu Arg Ile Thr Asp Val Leu Asp 215 220 Gln Lys Asn Tyr Val Glu Glu Leu Asn Arg His Leu Ser Cys Thr Val 235 240 Gly Asp Leu Gln Thr Lys Ile Asp Gly Leu Glu Lys Thr Asn Ser Lys 250 Leu Gln Glu Arg Val Ser Ala Ala Thr Asp Arg Ile Cys Ser Leu Gln 260 265 Glu Glu Gln Gln Leu Arg Glu Gln Asn Glu Leu Ile Arg 280

<210> 1341 <211> 233 <212>Amino acid <213> Homo sapiens

<400> 1341 Lys Pro Glu Gly Ala Arg Arg Val Gln Phe Val Met Gly Leu Phe Gly Lys Thr Gln Glu Lys Pro Pro Lys Glu Leu Val Asn Glu Trp Ser Leu 25 Lys Ile Arg Lys Glu Met Arg Val Val Asp Arg Gln Ile Arg Asp Ile 40 Gln Arg Glu Glu Lys Val Lys Arg Ser Val Lys Asp Ala Ala Lys 55 Lys Gly Gln Lys Asp Val Cys Ile Val Leu Ala Lys Glu Met Ile Arg 70 Ser Arg Lys Ala Val Ser Lys Leu Tyr Ala Ser Lys Ala His Met Asn 8.5 90 Ser Val Leu Met Gly Met Lys Asn Gln Leu Ala Val Leu Arg Val Ala 105 Gly Ser Leu Gln Lys Ser Thr Glu Val Met Lys Ala Met Gln Ser Leu 120 Val Lys Ile Pro Glu Ile Gln Ala Thr Met Arg Glu Leu Ser Lys Glu 135 Met Met Lys Ala Gly Ile Ile Glu Glu Met Leu Glu Asp Thr Phe Glu 150 155 Ser Met Asp Asp Gln Glu Glu Met Glu Glu Glu Ala Glu Met Glu Ile 165 170 Asp Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala Leu Gly Lys Ala Pro 185 Ser Lys Val Thr Asp Ala Leu Pro Glu Pro Glu Pro Pro Gly Ala Met 200 Ala Ala Ser Glu Asp Glu Glu Glu Glu Glu Ala Leu Glu Ala Met 215 Gln Ser Arg Leu Ala Thr Leu Arg Ser 230 233

<210> 1342 <211> 150 <212>Amino acid <213> Homo sapiens

<400> 1342 Arg Trp Asn Ser Ile Met Glu Leu Ala Leu Leu Cys Gly Leu Val Val Met Ala Gly Val Ile Pro Ile Gln Gly Gly Ile Leu Asn Leu Asn Lys Met Val Lys Gln Val Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro Tyr Gly Cys His Cys Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala 55 Thr Asp Trp Cys Cys Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys 70 75 Thr Gln Gly Cys Gly Ile Tyr Lys Asp Tyr Tyr Arg Tyr Asn Phe Ser 90 Gln Gly Asn Ile His Cys Ser Asp Lys Gly Ser Trp Cys Glu Gln Gln 105 Leu Cys Ala Cys Asp Lys Glu Val Ala Phe Cys Leu Lys Arg Asn Leu 120 125 Asp Thr Tyr Gln Lys Arg Leu Arg Phe Tyr Trp Arg Pro His Cys Arg 135 140 Gly Gln Thr Pro Gly Cys

145 150

<210> 1343 <211> 127 <212>Amino acid <213> Homo sapiens

<400> 1343 Lys Thr Val Ala Glu Glu Ala Ser Val Gly Asn Pro Glu Gly Ala Phe 1 5 10 Met Lys Met Leu Gln Ala Arg Lys Gln His Met Ser Thr Glu Leu Thr 20 25 Ile Glu Ser Glu Ala Pro Ser Asp Ser Ser Gly Ile Asn Leu Ser Gly Phe Gly Ser Glu Gln Leu Asp Thr Asn Asp Glu Ser Asp Val Ser Ser 55 Ala Leu Ser Tyr Ile Leu Pro Tyr Leu Ser Leu Arg Asn Leu Gly Ala 70 75 Glu Ser Ile Leu Leu Pro Phe Thr Glu Gln Leu Phe Ser Asn Val Gln 85 90 95 Asp Gly Asp Arg Leu Leu Ser Ile Leu Lys Asn Asn Arg Lys Ser Pro 100 105 110 Ser Gln Ser Ser Leu Leu Gly Asn Lys Phe Lys Asn Lys Ile Phe 120

<210> 1344 <211> 126 <212>Amino acid <213> Homo sapiens

<210> 1345 <211> 328 <212>Amino acid <213> Homo sapiens

<400> 1345 Asp Pro Arg Val Arg Pro Pro Leu Leu Gln Pro Pro Pro Leu Leu 10 Pro Arg Leu Val Ile Leu Lys Met Ala Pro Leu Asp Leu Asp Lys Tyr Val Glu Ile Ala Arg Leu Cys Lys Tyr Leu Pro Glu Asn Asp Leu Lys Arg Leu Cys Asp Tyr Val Cys Asp Leu Leu Leu Glu Glu Ser Asn Val 55 Gln Pro Val Ser Thr Pro Val Thr Val Cys Gly Asp Ile His Gly Gln 70 Phe Tyr Asp Leu Cys Glu Leu Phe Arg Thr Gly Gly Gln Val Pro Asp 85 90 Thr Asn Tyr Ile Phe Met Gly Asp Phe Val Asp Arg Gly Tyr Tyr Ser 105 Leu Glu Thr Phe Thr Tyr Leu Leu Ala Leu Lys Ala Lys Trp Pro Asp 125 120 Arg Ile Thr Leu Leu Arg Gly Asn His Glu Ser Arg Gln Ile Thr Gln 135 Val Tyr Gly Phe Tyr Asp Glu Cys Gln Thr Lys Tyr Gly Asn Ala Asn 155 150 Ala Trp Arg Tyr Cys Thr Lys Val Phe Asp Met Leu Thr Val Ala Ala 170 Leu Ile Asp Glu Gln Ile Leu Cys Val His Gly Gly Leu Ser Pro Asp 180 . 185 190 Ile Lys Thr Leu Asp Gln Ile Arg Thr Ile Glu Arg Asn Gln Glu Ile 200 Pro His Lys Gly Ala Phe Cys Asp Leu Val Trp Ser Asp Pro Glu Asp 215 Val Asp Thr Trp Ala Ile Ser Pro Arg Gly Ala Gly Trp Leu Phe Gly 230 235 Ala Lys Val Thr Asn Glu Phe Val His Ile Asn Asn Leu Lys Leu Ile 245 250 Cys Arg Ala His Gln Leu Val His Glu Gly Tyr Lys Phe Met Phe Asp 260 265 Glu Lys Leu Val Thr Val Trp Ser Ala Pro Asn Tyr Cys Tyr Arg Cys 280 Gly Asn Ile Ala Ser Ile Met Val Phe Lys Asp Val Asn Thr Arg Glu 295 300 Pro Lys Leu Phe Arg Ala Val Pro Asp Ser Glu Arg Val Ile Pro Pro 305 310 315 Arg Thr Thr Pro Tyr Phe Leu 325 328

<210> 1346 <211> 253 <212>Amino acid <213> Homo sapiens

40 His Leu Pro Ala Val Pro Ala Leu Asn Arg Thr Gly Asp Pro Gly Pro 55 Gly Pro Ser Ile Gln Lys Thr Tyr Asp Leu Thr Arg Tyr Leu Glu His 70 Gln Leu Arg Ser Leu Ala Gly Thr Tyr Leu Asn Tyr Leu Gly Pro Pro 90 Phe Asn Glu Pro Asp Phe Asn Pro Pro Arg Leu Gly Ala Glu Thr Leu 105 Pro Arg Ala Thr Val Asp Leu Glu Val Trp Arg Ser Leu Asn Asp Lys 120 Leu Arg Leu Thr Gln Asn Tyr Glu Ala Tyr Ser His Leu Leu Cys Tyr 135 Leu Arg Gly Leu Asn Arg Gln Ala Ala Thr Ala Glu Leu Arg Arg Ser 150 155 Leu Ala His Phe Cys Thr Ser Leu Gln Gly Leu Leu Gly Ser Ile Ala 170 Gly Val Met Ala Ala Leu Gly Tyr Pro Leu Pro Gln Pro Leu Pro Gly 185 Thr Glu Pro Thr Trp Thr Pro Gly Pro Ala His Ser Asp Phe Leu Gln 200 205 Lys Met Asp Asp Phe Trp Leu Leu Lys Glu Leu Gln Thr Trp Leu Trp 215 220 Arg Ser Ala Lys Asp Phe Asn Arg Leu Lys Lys Lys Met Gln Pro Pro 230 235 Ala Ala Ala Val Thr Leu His Leu Gly Ala His Gly Phe 245

<210> 1347 <211> 195 <212>Amino acid <213> Homo sapiens

<400> 1347 Ile Lys Ile Ser Leu Lys Lys Arg Ser Met Ser Gly Ile Ser Gly Cys 10 Pro Phe Phe Leu Trp Gly Leu Leu Ala Leu Leu Gly Leu Ala Leu Val Ile Ser Leu Ile Phe Asn Ile Ser His Tyr Val Glu Lys Gln Arg Gln 40 Asp Lys Met Tyr Ser Tyr Ser Ser Asp His Thr Arg Val Asp Glu Tyr 55 Tyr Ile Glu Asp Thr Pro Ile Tyr Gly Asn Leu Asp Asp Met Ile Ser 70 Glu Pro Met Asp Glu Asn Cys Tyr Glu Gln Met Lys Ala Arg Pro Glu 90 Lys Ser Val Asn Lys Met Gln Glu Ala Thr Pro Ser Ala Gln Ala Thr 105 Asn Glu Thr Gln Met Cys Tyr Ala Ser Leu Asp His Ser Val Lys Gly 120 Lys Arg Arg Lys Pro Arg Lys Gln Asn Thr His Phe Ser Asp Lys Asp 135 Gly Asp Glu Gln Leu His Ala Ile Asp Ala Ser Val Ser Lys Thr Thr 150 155 Leu Val Asp Ser Phe Ser Pro Glu Ser Gln Ala Val Glu Glu Asn Ile 170 His Asp Asp Pro Ile Arg Leu Phe Gly Leu Ile Arg Ala Lys Arg Glu 185 Pro Ile Asn

195

<210> 1348 <211> 268 <212>Amino acid <213> Homo sapiens

<400> 1348 Val Glu Phe His Pro Gln Arg Ala Arg Ala Gly Ala Arg Ala Pro Ser 10 Met Gly Val Leu Leu Thr Gln Arg Thr Leu Leu Ser Leu Val Leu Ala 25 Leu Leu Phe Pro Ser Met Ala Ser Met Ala Ala Ile Gly Ser Cys Ser 40 Lys Glu Tyr Arg Val Leu Leu Gly Gln Leu Gln Lys Gln Thr Asp Leu 60 Met Gln Asp Thr Ser Arg Leu Leu Asp Pro Tyr Ile Arg Ile Gln Gly 70 Leu Asp Val Pro Lys Leu Arg Glu His Cys Arg Glu Arg Pro Gly Ala 85 90 Phe Pro Ser Glu Glu Thr Leu Arg Gly Leu Gly Arg Arg Cys Phe Leu 105 Gln Thr Leu Asn Ala Thr Leu Gly Cys Val Leu His Arg Leu Ala Asp 120 Leu Glu Gln Arg Leu Pro Lys Ala Gln Asp Leu Glu Arg Ser Gly Leu 135 Asn Ile Glu Asp Leu Glu Lys Leu Gln Met Ala Arg Pro Asn Ile Leu 150 155 Gly Leu Arg Asn Asn Ile Tyr Cys Met Ala Gln Leu Leu Asp Asn Ser 170 Asp Thr Ala Glu Pro Thr Lys Ala Gly Arg Gly Ala Ser Gln Pro Pro 185 Thr Pro Thr Pro Ala Ser Asp Ala Phe Gln Arg Lys Leu Glu Gly Cys 200 Arg Phe Leu His Gly Tyr His Arg Phe Met His Ser Val Gly Arg Val 215 Phe Ser Lys Trp Gly Glu Ser Pro Asn Arg Ser Arg Arg His Ser Pro 230 235 His Gln Ala Leu Arg Lys Gly Val Arg Arg Thr Arg Pro Ser Arg Lys 245 250 Gly Lys Arg Leu Met Thr Arg Gly Gln Leu Pro Arg 265

<210> 1349 <211> 138 <212>Amino acid <213> Homo sapiens

40 45 Tyr Arg Gly Glu Ala Leu Glu Asp Phe Thr Gly Pro Asp Cys Arg Phe 55 Val Asn Phe Lys Lys Gly Asp Pro Val Tyr Val Tyr Tyr Lys Leu Ala 70 75 Arg Gly Trp Pro Glu Val Trp Ala Gly Ser Val Gly Arg Thr Phe Gly 85 Tyr Phe Pro Lys Asp Leu Ile Gln Val Val His Glu Tyr Thr Lys Glu 100 105 Glu Leu Gln Val Pro Thr Asn Glu Thr Asp Phe Val Cys Phe Asp Gly 120 Gly Arg Asp Asp Phe His Asn Tyr Asn Val 135 138

<210> 1350 <211> 236 <212>Amino acid <213> Homo sapiens

<400> 1350 · Ser Pro Leu Gly Lys Glu Gly Gln Glu Glu Val Arg Val Lys Ile Lys 10 Asp Leu Asn Glu His Ile Val Cys Cys Leu Cys Ala Gly Tyr Phe Val Asp Ala Thr Thr Ile Thr Glu Cys Leu His Thr Phe Cys Lys Ser Cys Ile Val Lys Tyr Leu Gln Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr Lys Leu Val Pro Gly Leu Gln Asp Ser Glu 85 90 Glu Lys Arg Ile Arg Glu Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val 105 Thr Gln Pro Thr Gly Glu Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro 120 Phe Ser Ser Phe Asp His Ser Lys Ala His Tyr Tyr Arg Tyr Asp Glu 135 Gln Leu Asn Leu Cys Leu Glu Arg Leu Ser Ser Gly Lys Asp Lys Asn 150 155 Lys Ser Val Leu Gln Asn Lys Tyr Val Arg Cys Ser Val Arg Ala Glu 165 170 Val Arg His Leu Arg Arg Val Leu Cys His Arg Leu Met Leu Asn Pro 185 Gln His Val Gln Leu Leu Phe Asp Asn Glu Val Leu Pro Asp His Met 200 Thr Met Lys Gln Ile Trp Leu Ser Arg Trp Phe Gly Lys Pro Ser Pro 215 Leu Leu Leu Gln Tyr Ser Val Lys Glu Lys Arg Arg 230

<210> 1351 <211> 178 <212>Amino acid <213> Homo sapiens

<400> 1351 Leu Trp Trp Tyr Ser Ala His Ala Ala Val Asp Ala Met Met Asp Val 10 Phe Gly Val Gly Phe Pro Ser Lys Val Pro Trp Lys Lys Met Ser Ala 25 Glu Glu Leu Glu Asn Gln Tyr Cys Pro Ser Arg Trp Val Val Arg Leu 40 Gly Ala Glu Glu Ala Leu Arg Thr Tyr Ser Gln Ile Gly Ile Glu Ala 55 Thr Thr Arg Ala Arg Ala Thr Arg Lys Ser Leu Leu His Val Pro Tyr 75 Gly Asp Gly Glu Gly Glu Lys Val Asp Ile Tyr Phe Pro Asp Glu Ser 90 Ser Glu Ala Thr Thr Arg Ala Arg Ala Thr Arg Lys Ser Leu Leu His 105 Val Pro Tyr Gly Asp Gly Glu Gly Glu Lys Val Asp Ile Tyr Phe Pro 125 120 Asp Glu Ser Ser Glu Ala Leu Pro Phe Phe Leu Phe Phe His Gly Gly Tyr Trp Gln Ser Gly Arg His Pro Gly Pro His Gly Arg Pro Gly Asp 150 155 Pro Gln Arg Cys Val Cys Pro Glu Ala Val Ser Lys Gln Gln Ala Phe 165 Ser Trp 178

<210> 1352 <211> 284 <212>Amino acid <213> Homo sapiens

<400> 1352 Gly Val Arg Met Ala Ser Arg Gly Arg Arg Pro Glu His Gly Gly Pro Pro Glu Leu Phe Tyr Asp Glu Thr Glu Ala Arg Lys Tyr Val Arg Asn 25 Ser Arg Met Ile Asp Ile Gln Thr Arg Met Ala Gly Arg Ala Leu Glu 40 Leu Leu Tyr Leu Pro Glu Asn Lys Pro Cys Tyr Leu Leu Asp Ile Gly 55 Cys Gly Thr Gly Leu Ser Gly Ser Tyr Leu Ser Asp Glu Gly His Tyr 75 . Trp Val Gly Leu Asp Ile Ser Pro Ala Met Leu Asp Glu Ala Val Asp 90 Arg Glu Ile Glu Gly Asp Leu Leu Gly Asp Met Gly Gln Gly Ile 105 Pro Phe Lys Pro Gly Thr Phe Asp Gly Cys Ile Ser Ile Ser Ala Val 120 Gln Trp Leu Cys Asn Ala Asn Lys Lys Ser Glu Asn Pro Ala Lys Arg 135 140 Leu Tyr Cys Phe Phe Ala Ser Leu Phe Ser Val Leu Val Arg Gly Ser 150 155 Arg Ala Val Leu Gln Leu Tyr Pro Glu Asn Ser Glu Gln Leu Glu Leu 170 Ile Thr Thr Gln Ala Thr Lys Ala Gly Phe Ser Gly Gly Met Val Val 185 190 Asp Tyr Pro Asn Ser Ala Lys Ala Lys Lys Phe Tyr Leu Cys Leu Phe

Thr Leu Ile Cys Arg Met Ala Gly Cys Gly Glu Ile Asp His Ser Ile

<210> 1353 <211> 363 <212>Amino acid <213> Homo sapiens

<400> 1353

Asn Met Leu Pro Thr Asn Arg Lys Ala Asn Glu Ser Cys Ser Asn Thr Ala Pro Ser Leu Thr Val Pro Glu Cys Ala Ile Cys Leu Gln Thr Cys 40 Val His Pro Val Ser Leu Pro Cys Lys His Val Phe Cys Tyr Leu Cys 55 Val Lys Gly Ala Ser Trp Leu Gly Lys Arg Cys Ala Leu Cys Arg Gln 70 75 Glu Ile Pro Glu Asp Phe Leu Asp Lys Pro Thr Leu Leu Ser Pro Glu 90 Glu Leu Lys Ala Ala Ser Arg Gly Asn Gly Glu Tyr Ala Trp Tyr Tyr 105 Glu Gly Arg Asn Gly Trp Trp Gln Tyr Asp Glu Arg Thr Ser Arg Glu 115 120 125 Leu Glu Asp Ala Phe Ser Lys Gly Lys Lys Asn Thr Glu Met Leu Ile 135 140 Ala Gly Phe Leu Tyr Val Ala Asp Leu Glu Asn Met Val Gln Tyr Arg 150 Arg Asn Glu His Gly Arg Arg Lys Ile Lys Arg Asp Ile Ile Asp 165 170 Ile Pro Lys Lys Gly Val Ala Gly Leu Arg Leu Asp Cys Asp Ala Asn 185 Thr Val Asn Leu Ala Arg Glu Ser Ser Ala Asp Gly Ala Asp Ser Val 200 Ser Ala Gln Ser Gly Ala Ser Val Gln Pro Leu Val Ser Ser Val Arg 220 215 Pro Leu Thr Ser Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser 235 Pro Asp Ala Ser Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu 250 255 Ser Gly Asp Asn Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu 265 270 Asp His Glu Ser Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser 280 285 Ile Glu Glu Thr Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser 295 300 Ala Val Val Ala Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser 310 315 Asn Ala Asn Gln Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp

325 330 335

Arg Ser Val Ala Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg
340 345 350

Arg Pro Asp Gly Gln Cys Thr Val Thr Glu Val
355 360 363

<210> 1354 <211> 368 <212>Amino acid <213> Homo sapiens

<400> 1354

Gly Ala Thr Pro Leu Gly Ser Val Gly Gly Arg Thr Gly Lys Met Asp Ala Ala Thr Leu Thr Tyr Asp Thr Leu Arg Phe Ala Glu Phe Glu Asp 25 Phe Pro Glu Thr Ser Glu Pro Val Trp Ile Leu Gly Arg Lys Tyr Ser 40 Ile Phe Thr Glu Lys Asp Glu Ile Leu Ser Asp Val Ala Ser Arg Leu 55 Trp Phe Thr Tyr Arg Lys Asn Phe Pro Ala Ile Gly Gly Thr Gly Pro 70 Thr Ser Asp Thr Gly Trp Gly Cys Met Leu Arg Cys Gly Gln Met Ile 85 90 Phe Ala Gln Ala Leu Val Cys Arg His Leu Gly Arg Asp Trp Arg Trp 105 Thr Gln Arg Lys Arg Gln Pro Asp Ser Tyr Phe Ser Val Leu Asn Ala 120 Phe Ile Asp Arg Lys Asp Ser Tyr Tyr Ser Ile His Gln Ile Ala Gln 135 140 Met Gly Val Gly Glu Gly Lys Ser Ile Gly Gln Trp Tyr Gly Pro Asn 150 155 Thr Val Ala Gln Val Leu Lys Lys Leu Ala Val Phe Asp Thr Trp Ser 165 170 Ser Leu Ala Val His Ile Ala Met Asp Asn Thr Val Val Met Glu Glu 180 185 Ile Arg Arg Leu Cys Arg Thr Ser Val Pro Cys Ala Gly Ala Thr Ala 200 Phe Pro Ala Asp Ser Asp Arg His Cys Asn Gly Phe Pro Ala Gly Ala 215 220 Glu Val Thr Asn Arg Pro Ser Pro Trp Arg Pro Leu Val Leu Leu Ile 230 235 Pro Leu Arg Leu Gly Leu Thr Asp Ile Asn Glu Ala Tyr Val Glu Thr 245 250 Leu Lys His Cys Phe Met Met Pro Gln Ser Leu Gly Val Ile Gly Gly 265 Lys Pro Asn Ser Ala His Tyr Phe Ile Gly Tyr Val Gly Glu Glu Leu 280 Ile Tyr Leu Asp Pro His Thr Thr Gln Pro Ala Val Glu Pro Thr Asp 295 300 Gly Cys Phe Ile Pro Asp Glu Ser Phe His Cys Gln His Pro Pro Cys 310 315 Arg Met Ser Ile Ala Glu Leu Asp Pro Ser Ile Ala Val Val Arg Gly 325 330 Gly His Leu Ser Thr Gln Ala Phe Gly Ala Glu Cys Cys Leu Gly Met 345 Thr Arg Lys Thr Phe Gly Phe Leu Arg Phe Phe Phe Ser Met Leu Gly 360 365

<210> 1355 <211> 117 <212>Amino acid <213> Homo sapiens

<400> 1355 Pro Thr Thr Ser Asn Arg Ala Ile Thr Leu Thr Ala Trp Pro Lys Ile 10 Pro Phe Leu Gly Ile Cys Glu Ala Lys Asn Pro Arg Ser Glu Asn Met Arg Leu Ala Thr Ile Leu Glu Val Ala Cys His His Leu Gly Ser Gly 40 Pro Pro Pro Ser Trp Glu Leu Trp Glu Gln Gly Pro Pro Gly Asn Ser Ser Arg Tyr Ile Glu Phe Leu Asn Lys His Thr Tyr Ile Lys Gly Thr 70 Leu Arg Val Tyr Thr Lys Lys Phe Cys Met Leu Val Ile Lys Ser Phe 90 Glu Ser Lys Ser Cys Val Cys Val Tyr Asp Phe Asp Ser Lys Ser Ser 100 105 Val Asn Val Thr Val 115 117

<210> 1356 <211> 126 <212>Amino acid <213> Homo sapiens

<400> 1356 Pro Arg Val Arg Phe Arg Leu Leu His Val Thr Ser Ile Arg Ser Ala 5 Trp Ile Leu Cys Gly Ile Ile Trp Ile Leu Ile Met Ala Ser Ser Ile 25 Met Leu Leu Asp Ser Gly Ser Glu Gln Asn Gly Ser Val Thr Ser Cys 40 Leu Glu Leu Asn Leu Tyr Lys Ile Ala Lys Leu Gln Thr Val Asn Tyr 55 Ile Ala Leu Val Val Gly Cys Leu Leu Pro Phe Phe Thr Leu Ser Ile 70 75 80 Cys Tyr Leu Leu Ile Ile Arg Val Leu Leu Lys Val Glu Val Pro Glu 90 Ser Gly Leu Arg Val Ser His Arg Lys Ala Leu Thr Thr Ile Ile Ile 100 105 110 Thr Leu Ile Ile Phe Phe Leu Cys Phe Leu Pro Tyr His Thr 120

<210> 1357 <211> 222 <212>Amino acid <213> Homo sapiens

<400> 1357 Gly Arg His Trp Leu Gly Ser Ala Gln Leu Thr Asp Gly Gly Ser Ala 5 10 Arg Lys Pro Lys Met Ala Val Pro Ala Ala Leu Ile Leu Arg Glu Ser 20 25 Pro Ser Met Lys Lys Ala Val Ser Leu Ile Asn Ala Ile Asp Thr Gly 40 Arg Phe Pro Arg Leu Leu Thr Arg Ile Leu Gln Lys Leu His Leu Lys 55 Ala Glu Ser Ser Phe Ser Glu Glu Glu Glu Glu Lys Leu Gln Ala Ala 70 75 Phe Ser Leu Glu Lys Gln Asp Leu His Leu Val Leu Glu Thr Ile Ser 85 90 Phe Ile Leu Glu Gln Ala Val Tyr His Asn Val Lys Pro Ala Ala Leu 100 105 Gln Gln Gln Leu Glu Asn Ile His Leu Arg Gln Asp Lys Ala Glu Ala 120 Phe Val Asn Thr Trp Ser Ser Met Gly Gln Glu Thr Val Glu Lys Phe 135 Arg Gln Arg Ile Leu Ala Pro Cys Lys Leu Glu Thr Val Gly Trp Gln 150 155 Leu Asn Leu Gln Met Ala His Ser Ala Gln Ala Lys Leu Lys Ser Pro 165 170 175 Gln Ala Val Leu Gln Leu Gly Val Asn Asn Glu Asp Ser Lys Ser Leu 180 185 Glu Lys Val Leu Val Glu Phe Ser His Lys Glu Leu Phe Asp Phe Tyr 195 200 Asn Lys Leu Glu Thr Ile Gln Ala Gln Leu Asp Ser Leu Thr 215

<210> 1358 <211> 116 <212>Amino acid <213> Homo sapiens

<400> 1358 Glu Ala Ser Ser Ala Lys Thr Lys Arg Lys Glu Glu Lys Gly Pro Lys 1 5 . 10 Ala Lys Met Lys Leu Met Val Leu Val Phe Thr Ile Gly Leu Thr Leu 20 25 Leu Leu Gly Val Gln Ala Met Pro Ala Asn Arg Leu Ser Cys Tyr Arg 3.5 40 Lys Ile Leu Lys Asp His Asn Cys His Asn Leu Pro Glu Gly Val Ala 55 Asp Leu Thr Gln Ile Asp Val Asn Val Gln Asp His Phe Trp Asp Gly 70 Lys Gly Cys Glu Met Ile Cys Tyr Cys Asn Phe Ser Glu Leu Leu Cys 85 90 Cys Pro Lys Asp Val Phe Phe Gly Pro Lys Ile Ser Phe Val Ile Pro 100 105 Cys Asn Asn Gln 115 116

<210> 1359

<211> 466 <212>Amino acid <213> Homo sapiens

<400> 1359 Lys Met Ala Glu Ala Val Phe His Ala Pro Lys Arg Lys Arg Val 10 Tyr Glu Thr Tyr Glu Ser Pro Leu Pro Ile Pro Phe Gly Gln Asp His 25 Gly Pro Leu Lys Glu Phe Lys Ile Phe Arg Ala Glu Met Ile Asn Asn 40 Asn Val Ile Val Arg Asn Ala Glu Asp Ile Glu Gln Leu Tyr Gly Lys 55 Gly Tyr Phe Gly Lys Gly Ile Leu Ser Arg Ser Arg Pro Ser Phe Thr 70 • 75 Ile Ser Asp Pro Lys Leu Val Ala Lys Trp Lys Asp Met Lys Thr Asn 90 Met Pro Ile Ile Thr Ser Lys Arg Tyr Gln His Ser Val Glu Trp Ala 105 Ala Glu Leu Met Arg Arg Gln Gly Gln Asp Glu Ser Thr Val Arg Arg 120 125 Ile Leu Lys Asp Tyr Thr Lys Pro Leu Glu His Pro Pro Val Lys Arg 135 140 Asn Glu Glu Ala Gln Val His Asp Lys Leu Asn Ser Gly Met Val Ser 150 155 Asn Met Glu Gly Thr Ala Gly Gly Glu Arg Pro Ser Val Val Asn Gly 165 170 Asp Ser Gly Lys Ser Gly Gly Val Gly Asp Pro Arg Glu Pro Leu Gly 180 185 Cys Leu Gln Glu Gly Ser Gly Cys His Pro Thr Thr Glu Ser Phe Glu 200 Lys Ser Val Arg Glu Asp Ala Ser Pro Leu Pro His Val Cys Cys 215 Lys Gln Asp Ala Leu Ile Leu Gln Arg Gly Leu His His Glu Asp Gly 230 235 Ser Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His 245 250 Glu Tyr Val Leu Val Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu 265 Ala Ala Pro Asn Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg 280 Arg Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu 295 300 Ala Phe Phe Leu Val Tyr Ala Leu Gly Cys Leu Ser Ile Tyr Tyr Glu 315 Lys Glu Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val 325 330 Gln Pro Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser 345 Lys Gly Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu 360 Leu Tyr Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile 375 380 Ile Glu Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu 390 395 Ser Trp Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser 405 410 Lys Glu Leu Met Leu Cys Tyr Leu Ile Lys Pro Ser Thr Met Thr Asp 425 Lys Glu Met Glu Ser Pro Glu Cys Met Lys Arg Ile Lys Val Gln Glu

Val Ile Leu Ser Arg Trp Val Ser Ser Arg Glu Arg Ser Asp Gln Asp 450 455 466 466

<210> 1360 <211> 419 <212>Amino acid <213> Homo sapiens

<400> 1360

Arg Asp Ile Trp Thr Met Asn Leu Gln Arg Tyr Trp Gly Glu Ile Pro 10 Ile Ser Ser Ser Gln Thr Asn Arg Ser Ser Phe Asp Leu Leu Pro Arg 20 25 Glu Phe Arg Leu Val Glu Val His Asp Pro Pro Leu His Gln Pro Ser 40 Ala Asn Lys Pro Lys Pro Pro Thr Met Leu Asp Ile Pro Ser Glu Pro 55 Cys Ser Leu Thr Ile His Thr Ile Gln Leu Ile Gln His Asn Arg Arg 70 75 Leu Arg Asn Leu Ile Ala Thr Ala Gln Ala Gln Asn Gln Gln Gln Thr 85 Glu Gly Val Lys Thr Glu Glu Ser Glu Pro Leu Pro Ser Cys Pro Gly 105 Ser Pro Pro Leu Pro Asp Asp Leu Leu Pro Leu Asp Cys Lys Asn Pro 120 Asn Ala Pro Phe Gln Ile Arg His Ser Asp Pro Glu Ser Asp Phe Tyr 135 140 Arg Gly Lys Gly Glu Pro Val Thr Glu Leu Ser Trp His Ser Cys Arg 150 155 Gln Leu Leu Tyr Gln Ala Val Ala Thr Ile Leu Ala His Ala Gly Phe 165 170 Asp Cys Ala Asn Glu Ser Val Leu Glu Thr Leu Thr Asp Val Ala His 180 185 Glu Tyr Cys Leu Lys Phe Thr Lys Leu Leu Arg Phe Ala Val Asp Arg 200 Glu Ala Arg Leu Gly Gln Thr Pro Phe Pro Asp Val Met Glu Gln Val 215 220 Phe His Glu Val Gly Ile Gly Ser Val Leu Ser Leu Gln Lys Phe Trp 230 235 Gln His Arg Ile Lys Asp Tyr His Ser Tyr Met Leu Gln Ile Ser Lys 245 250 Gln Leu Ser Glu Glu Tyr Glu Arg Ile Val Asn Pro Glu Lys Ala Thr 265 Glu Asp Ala Lys Pro Val Lys Ile Lys Glu Glu Pro Val Ser Asp Ile 280 Thr Phe Pro Val Ser Glu Glu Leu Glu Ala Asp Leu Ala Ser Gly Asp 295 300 Gln Ser Leu Pro Met Gly Val Leu Gly Ala Gln Ser Glu Arg Phe Pro 310 315 Ser Asn Leu Glu Val Glu Ala Ser Pro Gln Ala Ser Ser Ala Glù Val 325 330 Asn Ala Ser Pro Leu Trp Asn Leu Ala His Val Lys Met Glu Pro Gln 345 Glu Ser Glu Glu Gly Asn Val Ser Gly His Gly Val Leu Gly Ser Asp 360 Val Phe Glu Glu Pro Met Ser Gly Met Ser Glu Ala Gly Ile Pro Gln

<210> 1361 <211> 220 <212>Amino acid <213> Homo sapiens

<400> 1361 Arg Glu Gln Ile Leu Phe Ile Glu Ile Arg Asp Thr Ala Lys Gly Gly 5 Glu Thr Glu Gln Pro Pro Ser Leu Ser Pro Leu His Gly Gly Arg Met 25 Pro Glu Met Gly Glu Gly Ile Gln Ser Leu Ala Arg Glu Thr Gln Ser 40 His Arg Gly Arg Arg Gln Gly Trp Asp Ala Thr Trp Val Thr Arg Cys 55 Arg Glu Ser Leu Asn Arg Gly Gly Ala Gly Ala Gly Lys Arg Ala Gly 70 75 Ala Leu Ala His His Val Phe Leu Ala Leu Ile Glu Pro Asn Leu Ala 85 90 Glu Arg Glu Ala Ser Glu Glu Glu Val Lys Ala Cys Ser Asp Glu Thr 105 - 110 Val Val Ala Asp Leu Leu Val Lys Val Val Tyr Val Leu Gly Ala Ile 120 Leu Lys Ile Phe Leu Arg Glu Gly Asn Val Leu Asn Gln His Ser Gly 130 135 Met Asp Ile Glu Lys Tyr Ser Glu His Tyr Gln His Asp His Ser Pro 150 Gly Ala Glu Asp Asp Ala Ala Gly Gly Gln Leu Arg Pro Thr Ala Gln 165 170 Glu Arg Arg His Lys Glu Gly Ser Arg Gly Ser Pro Arg Cys Lys Arg 185 190 Ala Arg Lys Ala Val Gly Glu Ser Pro Gly Cys Pro Arg Pro Arg Val 195 200 Arg Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val 215

<210> 1362 <211> 82 <212>Amino acid <213> Homo sapiens

35 40 45

Lys Pro Asn His Tyr Ser Phe Ile Gly Leu Ser Met Leu Ser Pro Glu
50 55 60

Asn Phe Ser Ile Gly Cys Lys Tyr Ser Val Trp Phe Ser Glu Thr Lys
65 70 75 80

Gly Phe
82

<210> 1363 <211> 143 <212>Amino acid <213> Homo sapiens

<400> 1363 Gly Ala Gln Gly Val Arg Val Gly Ile Gly Glu Val Gly Arg Val Gln 5 Ala Pro Arg Val Ser Leu Leu His Ser Gln Gly Val Pro Arg Gly Gly 20 Thr Gly Glu Ala Val Lys Glu Glu Gly Arg Gly Ser Ser Leu His Pro Pro Leu Pro Pro Gln Gly Leu Gly Glu Tyr Ala Ala Cys Gln Ser His 55 Ala Phe Met Lys Gly Val Phe Thr Phe Val Thr Gly Thr Gly Met Ala 70 75 Phe Gly Leu Gln Met Phe Ile Gln Arg Lys Phe Pro Tyr Pro Leu Gln 90 Trp Ser Leu Leu Val Ala Val Val Ala Gly Ser Val Val Ser Tyr Gly 105 Val Thr Arg Val Glu Ser Glu Lys Cys Asn Asn Leu Trp Leu Phe Leu 120 125 Glu Thr Gly Gln Leu Pro Lys Asp Arg Ser Thr Asp Gln Arg Ser 135

<211> 194
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (194)
<223> X = any amino acid or stop code

<210> 1364

Pro Gly Leu Pro Ala Gly Glu Gln Leu Glu Gly Leu Lys His Ala Gln 85 90 Asp Ser Asp Pro Arg Ser Pro Leu Gly Lys Asn Xaa Gly His Gly Trp 100 105 Gln Val Gly Gln Gly Ser Asp Leu Gly Ser Pro Gln Pro Leu Pro Pro 120 125 Ser Ala Ser His Leu Tyr Ser Ser Arg Ala Ser Arg Cys Ser Gln Pro 135 140 Pro Cys Leu Ser Leu Pro Trp Phe Gly Val Arg Ser Ser Pro Ala Asn 150 155 Thr Tyr His Val Pro Val Thr Ser Leu Cys Pro Ser Pro Ala Leu His 165 170 Tyr Thr Ala Leu Gln Ala Gly Ile Ile Ser Thr Ser Gln Ala Arg Ala 185 Pro Arg 194

<210> 1365
<211> 114
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (114)
<223> X = any amino acid or stop code

<400> 1365 Pro Leu Leu Pro Arg Phe Ile Asp Ile Pro Cys Leu Leu Cys Tyr 10 Leu Thr Gln Val Thr Pro Asp Asp Met Tyr Ala Lys Ala Phe Leu Ile 25 Lys Pro Asn Thr Ala Ile Thr Gly Thr Asp Arg Arg Lys Leu Arg Ala Asp Glu Thr Thr Asp Phe Pro Thr Leu Gly Thr Asp Gln Ile Tyr Glu 55 Leu Leu Pro Gly Lys Asp Glu Leu Asn Ile Val Lys Ser Asn Ala His 70 Lys Arg Asp Ala Xaa Thr Ala Tyr Val Ser Gly Glu Asn His Ile Leu 90 Ser Glu Pro Xaa Lys Asn Leu Tyr Pro Ala Val Asn Thr Leu Ser Ser 105 Tyr Pro 114

<210> 1366 <211> 80 <212>Amino acid <213> Homo sapiens

Tyr Pro Trp Gln Gly Gln Gly Thr Ser Leu Trp Ser Ser Leu Ser Phe
35
His Trp Leu Leu Pro Gln Glu Asp Ser Ser Arg Leu Ser Ile Phe Pro
50
Leu Arg Ala Gly Ser Pro Pro Gln Pro Ala Gln Ala Pro Gln Arg Ile
65

<210> 1367 <211> 301 <212>Amino acid <213> Homo sapiens

<400> 1367 Lys Ser Arg Glu Gln Ser Ser Leu Phe Ala Ala Asp Ala Glu Arg Ser 5 Trp Gly Gly Lys Ser Cys Cys Leu Leu Arg Trp Arg Phe Val Gly Lys 20 25 Ala Ser His Phe Pro Arg Leu Leu Pro Leu Pro Gly Glu Glu Arg Pro 40 Glu Thr Lys Glu Arg Ala Trp Lys Met Glu Gln Thr Trp Thr Arg Asp 55 Tyr Phe Ala Glu Asp Asp Gly Glu Met Val Pro Arg Thr Ser His Thr 70 75 Ala Ala Ser Val Ser Leu Thr Ala Phe Leu Ser Asp Thr Lys Asp Arg 90 Gly Pro Pro Val Gln Ser Gln Ile Trp Arg Ser Gly Glu Lys Val Pro 100 105 Phe Val Gln Thr Tyr Ser Leu Arg Ala Phe Glu Lys Pro Pro Gln Val 120 125 Gln Thr Gln Ala Leu Arg Asp Phe Glu Lys His Leu Asn Asp Leu Lys 135 140 Lys Glu Asn Phe Ser Leu Lys Leu Leu Ile Tyr Phe Leu Glu Glu Arg 150 155 Met Gln Gln Lys Tyr Glu Ala Ser Arg Glu Asp Ile Tyr Lys Arg Asn 165 170 Thr Glu Leu Lys Val Glu Val Glu Ser Leu Lys Arg Glu Leu Gln Asp 185 Lys Lys Gln His Leu Asp Lys Thr Trp Ala Asp Val Glu Asn Leu Asn 200 205 Ser Gln Asn Glu Ala Glu Leu Arg Arg Gln Phe Glu Glu Arg Gln Gln 215 220 Glu Met Glu His Val Tyr Glu Leu Leu Glu Asn Lys Met Gln Leu Leu 235 Gln Glu Glu Ser Arg Leu Ala Lys Asn Glu Ala Ala Arg Met Ala Ala 245 250 Leu Val Glu Ala Glu Lys Glu Cys Asn Leu Glu Leu Ser Glu Lys Leu 265 Lys Gly Val Thr Lys Asn Trp Glu Asp Val Pro Gly Asp Gln Val Lys 280 Pro Asp Gln Tyr Thr Glu Ala Leu Ala Gln Arg Asp Lys 295

<210> 1368 <211> 308 <212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(308)

<223> X = any amino acid or stop code

<400> 1368 Thr Arg Arg Arg Gly Thr Thr Trp Arg Ser Pro Arg Pro Arg Ala 10 Ser Thr Ser Arg Pro Ser Thr Arg Pro Arg Gly Val Ala Ser Trp Pro 25 Trp Glu Thr Ala Gly Thr Ala Thr Thr Gly Pro Gly Pro Ser Ala Arg 40 Thr Arg Arg Arg Ala Ala Arg Arg Arg Ser Arg Pro Arg Arg Arg 60 Ala His Gly Gly Leu Ser Gln Pro Ala Gly Trp Gln Ser Leu Leu Ser 70 75 Phe Thr Ile Leu Phe Leu Ala Trp Leu Ala Gly Phe Ser Ser Arg Leu 85 Phe Ala Val Ile Arg Phe Glu Ser Ile Ile His Glu Phe Asp Pro Trp 100 105 Phe Asn Tyr Arg Ser Thr His His Leu Ala Ser His Gly Phe Tyr Glu 120 125 Phe Leu Asn Trp Phe Asp Glu Arg Ala Trp Tyr Pro Leu Gly Arg Ile 135 Val Gly Gly Thr Val Tyr Pro Gly Leu Met Ile Thr Ala Gly Leu Ile 150 155 His Trp Ile Leu Asn Thr Leu Asn Ile Thr Val His Ile Arg. Asp Val 170 Cys Val Phe Leu Ala Pro Thr Phe Ser Gly Leu Thr Ser Ile Ser Thr 180 185 Phe Leu Leu Thr Arg Glu Leu Trp Asn Gln Gly Ala Gly Leu Leu Ala 200 205 Ala Cys Phe Ile Ala Ile Val Pro Gly Tyr Ile Ser Arg Ser Val Ala 215 220 Gly Ser Phe Asp Asn Glu Gly Ile Ala Ile Phe Ala Leu Gln Phe Thr 230 235 Tyr Tyr Leu Trp Val Lys Ser Val Lys Thr Gly Ser Val Phe Trp Thr 245 250 Met Cys Cys Cys Leu Ser Tyr Phe Tyr Met Val Ser Ala Trp Gly Gly 260 265 Tyr Val Phe Ile Ile Asn Leu Ile Pro Leu His Ala Phe Val Leu Val 280 285 Leu Met Gln Arg Tyr Ser Lys Arg Val Tyr Ile Xaa Tyr Ser Thr Phe 295 Tyr Ile Val Gly 305 308

<400> 1369

<210> 1369 <211> 212 <212>Amino acid <213> Homo sapiens

Arg Arg Leu Ile Val Val Leu Ser Asp Ala Phe Leu Ser Arg Ala Trp 5 10 Cys Ser His Ser Phe Arg Val Gly Pro Ala Arg Gly Trp Val Gly Pro 2.0 25 Ser Val Ala Pro Thr Pro Leu Thr Val Pro Pro Arg Arg Glu Gly Leu 40 Cys Arg Leu Leu Glu Leu Thr Arg Arg Pro Ile Phe Ile Thr Phe Glu 55 Gly Gln Arg Arg Asp Pro Ala His Pro Ala Leu Arg Leu Leu Arg Gln 70 His Arg His Leu Val Thr Leu Leu Leu Trp Arg Pro Gly Ser Val Thr 85 90 Pro Ser Ser Asp Phe Trp Lys Glu Val Gln Leu Ala Leu Pro Arg Lys 105 Val Arg Tyr Arg Pro Val Glu Gly Asp Pro Gln Thr Gln Leu Gln Asp 120 Asp Lys Asp Pro Met Leu Ile Leu Arg Gly Arg Val Pro Glu Gly Arg 135 140 Ala Leu Asp Ser Glu Val Asp Pro Asp Pro Glu Gly Asp Leu Gly Val 150 155 Arg Gly Pro Val Phe Gly Glu Pro Ser Ala Pro Pro His Thr Ser Gly 170 Val Ser Leu Gly Glu Ser Arg Ser Ser Glu Val Asp Val Ser Asp Leu 180 185 Gly Ser Arg Asn Tyr Ser Ala Arg Thr Asp Phe Tyr Cys Leu Val Ser 195 200 Lys Asp Asp Met 210 212

<210> 1370 <211> 281 <212>Amino acid <213> Homo sapiens

<400> 1370 Leu Ser His Glu Gly Trp Arg Arg Gly Arg Glu Gly Glu Arg Ile Asn Ser Ser Val Ala Ser Leu Ala Pro Leu Cys Ile Leu Pro Asp Leu Pro Ser Asn Met His Leu Ala Arg Leu Val Gly Ser Cys Ser Leu Leu Leu Leu Gly Ala Leu Ser Gly Trp Ala Ala Ser Asp Asp Pro Ile Glu 55 Lys Val Ile Glu Gly Ile Asn Arg Gly Leu Ser Asn Ala Glu Arg Glu 70 75 Val Gly Lys Ala Leu Asp Gly Ile Asn Ser Gly Ile Thr His Ala Gly 90 Arg Glu Val Glu Lys Val Phe Asn Gly Leu Ser Asn Met Gly Ser His 105 Thr Gly Lys Glu Leu Asp Lys Gly Val Gln Gly Leu Asn His Gly Met 120 Asp Lys Val Ala His Glu Ile Asn His Gly Ile Gly Gln Ala Gly Lys 135 140 Glu Ala Glu Lys Leu Gly His Gly Val Asn Asn Ala Ala Gly Gln Ala 155 Gly Lys Glu Ala Asp Lys Ala Val Gln Gly Phe His Thr Gly Val His 165 170 Gln Ala Gly Lys Glu Ala Glu Lys Leu Gly Gln Gly Val Asn His Ala 180 185

Ala Asp Gln Ala Gly Lys Glu Val Glu Lys Leu Gly Gln Gly Ala His 200 His Ala Ala Gly Gln Ala Gly Lys Glu Leu Gln Asn Ala His Asn Gly 215 220 Val Asn Gln Ala Ser Lys Glu Ala Asn Gln Leu Leu Asn Gly Asn His 230 235 Gln Ser Gly Ser Ser His Gln Gly Gly Ala Thr Thr Pro Leu 245 250 Ala Ser Gly Ala Ser Val Asn Thr Pro Phe Ile Asn Leu Pro Ala Leu 260 265 Trp Arg Ser Val Ala Asn Ile Met Pro 275 280 281

<210> 1371 <211> 119 <212>Amino acid <213> Homo sapiens

<210> 1372 <211> 108 <212>Amino acid <213> Homo sapiens

 400> 1372

 Glu Arg Ser Gly Trp Pro Gln Pro Glu Gly Thr Val Thr Ala Gln Gly 1
 5
 10
 15

 Pro Leu Phe Trp Glu Arg Leu Ser Gly Ala Val Thr Val Ser Ser Gly 20
 20
 30

 Tyr Lys Ala Asp Met Trp Pro Ser Phe Pro Gln Val Arg Val Gly Ser 35
 40
 45

 Phe Leu Phe Gly Ile Leu Phe Phe Ser Phe Gly Ser Ser Ser Leu Pro 50
 55
 60

 Pro Gly Leu Pro Pro Pro Pro Pro Pro Ser Leu Leu Cys Cys Ala Val Gln Trp 65
 70
 75
 80

 Gly Ala Arg Ala Leu Phe Leu Pro Cys Leu Lys Glu Arg Ala Leu Gly
 85
 80

Met Glu Met Arg Asn Asn Thr Leu Ser Phe Arg Gln
100 105 108

<210> 1373
<211> 209
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(209)
<223> X = any amino acid or stop code

<400> 1373 Ser Ser Ser Asn Leu Arg Leu Ser Phe Leu Ile Asn Glu Asn Ile Leu 10 Gly Lys Cys Phe Arg Ser Gly Pro Ser Cys Ala Gly Pro Arg Ile Ser 20 25 Pro Leu Ala Ala Gln Tyr Glu Cys Pro Arg Pro Ser Leu Leu Ile Met 40 Ala Ser Val Pro Lys Thr Asn Lys Ile Glu Pro Arg Ser Tyr Ser Ile 55 Ile Pro Ser Cys Gly Ile Arg Arg Leu Gly Pro Ala Leu Asn Thr Leu 75 Ile Phe Gln Ser Lys Arg Phe Gly Pro Arg Gly His Ser Ala Lys Ser 90 Ile Glu Gly Ala Pro Arg Gly Lys Gly Arg Gly Arg Ala Val Ala Arg 105 Leu Ala Ala Asp Arg Pro Pro Ala Pro Lys Ile Gln Leu Arg Ala Phe 120 125 Xaa Leu Gln Gln Leu Xaa Tyr Thr Leu Leu Glu Leu Glu Leu Pro Arg 135 140 Leu Leu Ala Pro Asp Leu Pro Ser Asn Gly Ser Ser Leu Lys Asp Leu 150 155 Lys Trp Thr His Ser Asn Tyr Arg Ala Ser Lys Glu Ser Cys Ile Val 170 Ile Phe Val Thr Thr Ser Pro Gly Arg Glu Trp Val Ile Cys Ala Leu 185 Ala Ala Phe Leu Gly Cys Gly Ser Leu Ser Gln Ala Pro Ser Pro Glu 200 205 Ser 209

<210> 1374 <211> 153 <212>Amino acid <213> Homo sapiens

3.5 40 Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly Gln Pro Arg Gly 55 Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr Ile Cys Ser Ile 75 Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala Asn Gly Ser Pro 90 Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly 105 Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly Leu Arg Gly Lys 120 125 Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp Gln Gly Glu Thr 135 Gly Lys Lys Gly Pro Ile Gly Pro Glu 145 150 153

<210> 1375 <211> 149 <212>Amino acid <213> Homo sapiens

<400> 1375 Phe Ala Ser Ala Met Leu Gly Ser Arg Val Asp Arg Pro Lys Leu Ser 10 Val Ala Pro Ser Val Val Leu Glu Glu Asp Gln Val Leu Val Ser Pro 20 Ala Val Asp Leu Glu Ala Gly Cys Arg Leu Arg Asp Phe Thr Glu Lys Ile Met Asn Val Lys Gly Lys Val Ile Leu Ser Met Leu Val Val Ser 55 Thr Val Ile Ile Val Phe Trp Glu Phe Ile Asn Ser Thr Glu Gly Ser 70 75 Phe Leu Trp Ile Tyr His Ser Lys Asn Pro Glu Val Asp Asp Ser Ser 85 90 Ala Gln Lys Gly Trp Trp Phe Leu Ser Trp Phe Asn Asn Gly Ile His 105 Asn Tyr Gln Gln Gly Glu Glu Asp Ile Asp Lys Glu Lys Gly Arg Glu 120 125 Glu Thr Lys Gly Arg Lys Met Thr Gln Gln Ser Phe Gly Tyr Gly Thr Gly Leu Ile Gln Thr 145 149

<210> 1376 <211> 416 <212>Amino acid <213> Homo sapiens

Ala Lys Lys Ala Ala Ser Lys Thr Leu Leu Glu Lys Ser Gln Phe Ser Asp Lys Pro Val Gln Asp Arg Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu His Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp Val Leu Gly Tyr Val Thr Pro Trp Asn Ser His Gly Tyr Asp Val Thr Lys Val Phe Gly Ser Lys Phe Thr Gln Ile Ser Pro Val Trp Leu Gln Leu Lys Arg Arg Gly Arg Glu Met Phe Glu Val Thr Gly Leu His Asp Val Asp Gln Gly Trp Met Arg Ala Val Arg Lys His Ala Lys Gly Leu His Ile Val Pro Arg Leu Leu Phe Glu Asp Trp Thr Tyr Asp Asp Phe Arg Asn Val Leu Asp Ser Glu Asp Glu Ile Glu Glu Leu Ser Lys Thr Val Val Gln Val Ala Lys Asn Gln His Phe Asp Gly Phe Val Val Glu Val Trp Asn Gln Leu Leu Ser Gln Lys Arg Val Gly Leu Ile His Met Leu Thr His Leu Ala Glu Ala Leu His Gln Ala Arg Leu Leu Ala Leu Leu Val Ile Pro Pro Ala Ile Thr Pro Gly Thr Asp Gln Leu Gly Met Phe Thr His Lys Glu Phe Glu Gln Leu Ala Pro Val Leu Asp Gly Phe Ser Leu Met Thr Tyr Asp Tyr Ser Thr Ala His Gln Pro Gly Pro Asn Ala Pro Leu Ser Trp Val Arg Ala Cys Val Gln Val Leu Asp Pro Lys Ser Lys Trp Arg Ser Lys Ile Leu Leu Gly Leu Asn Phe Tyr Gly Met Asp Tyr Ala Thr Ser Lys Asp Ala Arg Glu Pro Val Val Gly Ala Arg Tyr Ile Gln Thr Leu Lys Asp His Arg Pro Arg Met Val Trp Asp Ser Gln Val Ser Glu His Phe Phe Glu Tyr Lys Lys Ser Arg Ser Gly Arg His Val Val Phe Tyr Pro Thr Leu Lys Ser Leu Gln Val Arg Leu Glu Leu Ala Arg Glu Leu Gly Val Gly Val Ser Ile Trp Glu Leu Gly Gln Gly Leu Asp Tyr Phe Tyr Asp Leu Leu

<210> 1377 <211> 316 <212>Amino acid <213> Homo sapiens

20 25 Asp Ser Trp Gly Gln Leu Val Glu Ala Ile Asp Glu Tyr Gln Ile Leu 40 Ala Arg His Leu Gln Lys Glu Ala Gln Ala Gln His Asn Asn Ser Glu 55 Phe Thr Glu Glu Gln Lys Lys Thr Ile Gly Lys Ile Ala Thr Cys Leu 75 Glu Leu Arg Ser Ala Ala Leu Gln Ser Thr Gln Ser Gln Glu Glu Phe 90 Lys Leu Glu Asp Leu Lys Lys Leu Glu Pro Ile Leu Lys Asn Ile Leu 100 105 Thr Tyr Asn Lys Glu Phe Pro Phe Asp Val Gln Pro Val Pro Leu Arg 115 120 125 Arg Ile Leu Ala Pro Gly Glu Glu Glu Asn Leu Glu Phe Glu Glu Asp 135 140 Glu Glu Glu Gly Gly Ala Gly Ala Gly Ser Pro Asp Ser Phe Pro Ala 150 155 Arg Val Pro Gly Thr Leu Leu Pro Arg Leu Pro Ser Glu Pro Gly Met 165 170 Thr Leu Leu Thr Ile Arg Ile Glu Lys Ile Gly Leu Lys Asp Ala Gly 185 Gln Cys Ile Asn Pro Tyr Ile Thr Val Ser Val Lys Asp Leu Asn Gly 200 Ile Asp Leu Thr Pro Val Gln Asp Thr Pro Val Ala Ser Arg Lys Glu 215 Asp Thr Tyr Val His Phe Asn Val Asp Ile Glu Leu Gln Lys His Val 230 235 Glu Lys Leu Thr Lys Gly Ala Ala Ile Phe Phe Glu Phe Lys His Tyr 245 250 Lys Pro Lys Lys Arg Phe Thr Ser Thr Lys Cys Phe Ala Phe Met Glu 265 Met Asp Glu Ile Lys Leu Gly Pro Ile Val Ile Glu Leu Tyr Lys Lys 280 285 Pro Thr Asp Phe Lys Arg Lys Gln Leu Gln Leu Leu Thr Lys Lys Pro 295 Leu Tyr Leu His Leu His Gln Thr Leu His Lys Glu 310

<210> 1378 <211> 90 <212>Amino acid <213> Homo sapiens

<210> 1379

<211> 332 <212>Amino acid <213> Homo sapiens

<400> 1379 Lys Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser Pro Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala Thr His Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp Ile Leu Cys Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val Leu Ala Pro 55 Thr His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln Lys Glu Thr Asp 75 Cys Asp Leu Cys Leu Arg Val Ala Val His Leu Ala Val His Gly His 8.5 90 Trp Glu Glu Pro Glu Asp Glu Glu Lys Phe Gly Gly Ala Ala Asp Ser 105 Gly Val Glu Glu Pro Arg Asn Ala Ser Leu Gln Ala Gln Val Val Leu 120 Ser Phe Gln Ala Tyr Pro Thr Ala Arg Cys Val Leu Leu Glu Val Gln 135 140 Val Pro Ala Ala Leu Val Gln Phe Gly Gln Ser Val Gly Ser Val Val 150 155 Tyr Asp Cys Phe Glu Ala Ala Leu Gly Ser Glu Val Arg Ile Trp Ser 170 Tyr Thr Gln Pro Arg Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu 180 185 Pro Asp Cys Arg Gly Leu Glu Val Trp Asn Ser Ile Pro Ser Cys Trp 200 Ala Leu Pro Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu 215 220 Val Leu Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp 230 235 Asn Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Val 245 250 Arg Pro Pro Pro Ser Gln Val His Ser His Cys Arg Pro Cys Leu Cys 260 265 Lys Asp Ala Val Pro Tyr Gln Arg Gly Ser Leu Lys Arg Thr His Pro 280 Lys Gln Gly Lys Ile Gly Gly Gly Thr Ser Ala Phe Leu Val Ser Leu 295 300 Thr Leu Ala Ser Ser Ser Ser Ser Leu Ser Ser Pro Thr Ser Phe Leu 310 315 . Tyr Leu Phe His Arg Leu Asp Arg Arg Ser Leu Pro 325

<210> 1380 <211> 117 <212>Amino acid <213> Homo sapiens

 $<\!400\!>$ 1380 Leu Arg Leu Trp Asn Arg Asn Gln Met Met His Asn Ile Ile Val Lys

5 10 Glu Leu Ile Val Thr Phe Phe Leu Gly Ile Thr Val Val Gln Met Leu 20 25 Ile Ser Val Thr Gly Leu Lys Gly Val Glu Ala Gln Asn Gly Ser Glu 40 Ser Glu Val Phe Val Gly Lys Tyr Glu Thr Leu Val Phe Tyr Trp Pro 55 Ser Leu Leu Cys Leu Ala Phe Leu Leu Gly Arg Phe Leu His Met Phe 70 75 Val Lys Ala Leu Arg Val His Leu Gly Trp Glu Leu Gln Val Glu Glu 90 Lys Ser Val Leu Glu Val His Gln Gly Glu His Val Lys Gln Leu Leu 105 Arg Ile Pro Arg Pro 115 117

<210> 1381 <211> 216 <212>Amino acid <213> Homo sapiens

<400> 1381 Lys Val Asn Arg Lys Leu Arg Lys Lys Gly Lys Ile Ser His Asp Lys 10 Arg Lys Lys Ser Arg Ser Lys Ala Ile Gly Ser Asp Thr Ser Asp Ile Val His Ile Trp Cys Pro Glu Gly Met Lys Thr Ser Asp Ile Lys Glu 40 Leu Asn Ile Val Leu Pro Glu Phe Glu Lys Thr His Leu Glu His Gln 55 Gln Arg Ile Glu Ser Lys Val Cys Lys Ala Ala Ile Ala Thr Phe Tyr 75 Val Asn Val Lys Glu Gln Phe Ile Lys Met Leu Lys Glu Ser Gln Met Leu Thr Asn Leu Lys Arg Lys Asn Ala Lys Met Ile Ser Asp Ile Glu 100 Lys Lys Arg Gln Arg Met Ile Glu Val Gln Asp Glu Leu Leu Arg Leu 115 120 Glu Pro Gln Leu Lys Gln Leu Gln Thr Lys Tyr Asp Glu Leu Lys Glu 135 Arg Lys Ser Ser Leu Arg Asn Ala Ala Tyr Phe Leu Ser Asn Leu Lys 150 155 . 160 Gln Leu Tyr Gln Asp Tyr Ser Asp Val Gln Ala Gln Glu Pro Asn Val 165 170 Lys Glu Thr Tyr Asp Ser Ser Ser Leu Pro Ala Leu Leu Phe Lys Ala 180 185 190 Arg Thr Leu Leu Gly Ala Glu Ser His Leu Arg Asn Ile Asn His Gln 200 Leu Glu Lys Leu Leu Asp Gln Gly 215 216

<210> 1382 <211> 137 <212>Amino acid <213> Homo sapiens <220> <221> misc feature

<222> (1)...(137) <223> X = any amino acid or stop code

<400> 1382 Val Trp Val Ala Met Glu Glu Pro Pro Val Arg Glu Glu Glu Xaa Glu 10 Glu Gly Glu Glu Asp Glu Glu Arg Asp Glu Val Gly Pro Glu Gly Ala 25 Leu Gly Lys Ser Pro Phe Gln Leu Thr Ala Glu Asp Val Tyr Asp Ile 40 Ser Tyr Leu Leu Gly Arg Glu Leu Met Ala Leu Gly Ser Asp Pro Arg 55 Val Thr Gln Leu Gln Phe Lys Val Val Arg Val Leu Glu Met Leu Glu 70 Ala Leu Val Asn Glu Gly Ser Leu Ala Leu Glu Glu Leu Lys Met Glu 85 90 Arg Asp His Leu Arg Lys Glu Val Glu Gly Leu Arg Arg Gln Ser Pro 105 Pro Ala Ser Gly Glu Trp Pro Asp Ser Thr Lys Arg Arg Pro Arg Arg 120 Lys Lys Arg Lys Arg Cys Cys Gly Tyr 135

<210> 1383 <211> 90 <212>Amino acid <213> Homo sapiens

<210> 1384 <211> 166 <212>Amino acid <213> Homo sapiens

Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln Pro His Val Ser Arg Thr 25 Leu Phe Leu Leu Leu Leu Ala Ala Ser Ala Trp Gly Val Thr Leu 40 Ser Pro Lys Asp Cys Gln Val Phe Arg Ser Asp His Gly Ser Ser Ile 55 Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly Tyr Leu Pro Ala Asp Thr 70 75 Val His Leu Ala Val Glu Phe Phe Asn Leu Thr His Leu Pro Ala Asn 90 Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu Leu His Leu Ser Ser Asn 105 Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu Arg Pro Val Pro Gln Leu 120 125 Arg Val Leu Asp Leu Thr Arg Asn Ala Leu Thr Gly Leu Pro Pro Gly 135 140 Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr Leu Val Leu Lys Glu Asn 150 155 Gln Leu Glu Val Leu Glu 165 166

<210> 1385 <211> 164 <212>Amino acid <213> Homo sapiens

<400> 1385 Glu Arg Pro Arg Ile Met Asp Leu Ala Gly Leu Leu Lys Ser Gln Phe 10 Leu Cys His Leu Val Phe Cys Tyr Val Phe Ile Ala Ser Gly Leu Ile 25 Ile Asn Thr Ile Gln Leu Phe Thr Leu Leu Leu Trp Pro Ile Asn Lys 40 Gln Leu Phe Arg Lys Ile Asn Cys Arg Leu Ser Tyr Cys Ile Ser Ser 60 Gln Leu Val Met Leu Leu Glu Trp Trp Ser Gly Thr Glu Cys Thr Ile 70 Phe Thr Asp Pro Arg Ala Tyr Leu Lys Tyr Gly Lys Glu Asn Ala Ile 85 90 Val Val Leu Asn His Lys Phe Glu Ile Asp Phe Leu Cys Gly Trp Ser 105 Leu Ser Glu Arg Phe Gly Leu Leu Gly Val Ser Gln Lys Cys Ile Pro 120 Pro Cys Leu Thr His Phe Phe Gly Ser Ala Pro Pro Leu Val Phe Leu 135 140 Leu Leu Val Ile Gln Asn Leu Gln Lys Asn Gln Gln Ser Phe Tyr Leu 150 155 Met Lys Trp Ser 164

<210> 1386 <211> 289 <212>Amino acid <213> Homo sapiens

<400> 1386 Met Ile Val Phe Gly Trp Ala Val Phe Leu Ala Ser Arg Ser Leu Gly Gln Gly Leu Leu Thr Leu Glu Glu His Ile Ala His Phe Leu Gly 20 25 Thr Gly Gly Ala Ala Thr Thr Met Gly Asn Ser Cys Ile Cys Arg Asp 40 Asp Ser Gly Thr Asp Asp Ser Val Asp Thr Gln Gln Gln Ala Glu 55 Asn Ser Ala Val Pro Thr Ala Asp Thr Arg Ser Gln Pro Arg Asp Pro 70 75 Val Arg Pro Pro Arg Arg Gly Arg Gly Pro His Glu Pro Arg Arg Lys 90 Lys Gln Asn Val Asp Gly Leu Val Leu Asp Thr Leu Ala Val Ile Arg 105 Thr Leu Val Asp Asn Asp Gln Glu Pro Pro Tyr Ser Met Ile Thr Leu 120 His Glu Met Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser 135 140 Leu Ile Arg Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile 150 _. 155 Thr Leu Leu Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln 165 170 Lys Leu Thr Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp 185 Ser Ser His Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys 195 200 Leu Ala Glu Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro 215 220 Gly Ile Leu Glu Tyr Leu Leu Gln Cys Leu Leu Gln Ser His Pro Thr 230 Val Met Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser 245 250 Glu Asn Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val 265 Thr Leu Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val 280 Gly : 289

<210> 1387 <211> 320 <212>Amino acid <213> Homo sapiens

<400> 1387

50 55 60

Cys Arg Pro Val Leu Thr Ser Val Ala Leu Asn Ala Asn Phe Val Ser 65 70 75 80

Trp Lys Ser Arg Thr Lys Tyr Thr Ile Thr Pro Val Lys Met Arg Lys

90

Ser Gly Gly Arg Asp His Thr Gly Arg Ile Arg Val His Gly Ile Gly 100 105 Gly Gly His Lys Gln Arg Tyr Arg Met Ile Asp Phe Leu Arg Phe Arg 120 Pro Glu Glu Thr Lys Ser Gly Pro Phe Glu Glu Lys Val Ile Gln Val 130 135 140 Arg Tyr Asp Pro Cys Arg Ser Ala Asp Ile Ala Leu Val Ala Gly Gly 150 155 Ser Arg Lys Arg Trp Ile Ile Ala Thr Glu Asn Met Gln Ala Gly Asp 165 170 Thr Ile Leu Asn Ser Asn His Ile Gly Arg Met Ala Val Ala Ala Arg 185 Glu Gly Asp Ala His Pro Leu Gly Ala Leu Pro Val Gly Thr Leu Ile 200 205 Asn Asn Val Glu Ser Glu Pro Gly Arg Gly Ala Gln Tyr Ile Arg Ala 215 Ala Gly Thr Cys Gly Val Leu Leu Arg Lys Val Asn Gly Thr Ala Ile 235 230 Ile Gln Leu Pro Ser Lys Arg Gln Met Gln Val Leu Glu Thr Cys Val 245 250 Ala Thr Val Gly Arg Val Ser Asn Val Asp His Asn Lys Arg Val Ile 265 Gly Lys Ala Gly Arg Asn Arg Trp Leu Gly Lys Arg Pro Asn Ser Gly 280 Arg Trp His Arg Lys Gly Gly Trp Ala Gly Arg Lys Ile Arg Pro Leu 290 295 Pro Pro Met Lys Ser Tyr Val Lys Leu Pro Ser Ala Ser Ala Gln Ser 310 315

<210> 1388 <211> 140 <212>Amino acid <213> Homo sapiens

<400> 1388 Pro Val Gln Gly Ala Arg Cys Trp Leu Asp Ala Arg Arg Asn Val Arg Val Phe Ser Gly Val Cys Cys Gly Cys Gly Ile His Gly Tyr Trp Ala 25 Glu Pro Cys Gly Gly Cys Gly Ala Met Glu Gly Leu Arg Ser Ser Val 40 Glu Leu Asp Pro Glu Leu Thr Pro Gly Lys Leu Asp Glu Glu Met Val 55 Gly Leu Pro Pro His Asp Ala Ser Pro Gln Val Thr Phe His Ser Leu 70 75 Asp Gly Lys Thr Val Val Cys Pro His Phe Met Gly Leu Leu Leu Gly 85 90 Leu Leu Leu Leu Thr Leu Ser Val Arg Asn Gln Leu Cys Val Arg 105 Gly Glu Arg Gln Leu Ala Glu Thr Leu His Ser Gln Val Lys Glu Lys 120 Ser Gln Leu Ile Gly Lys Lys Thr Asp Cys Arg Asp 135

<210> 1389 <211> 448

<212>Amino acid <213> Homo sapiens

<400> 1389 Gly Ala Arg Gly Arg Pro Leu Ala Glu Thr Trp Pro Phe Leu Thr Ala Pro Val Leu Pro Gly Gln Leu Gln Ile Thr Glu Pro Thr Met Ala Glu Lys Gly Asp Cys Ile Ala Ser Val Tyr Gly Tyr Asp Leu Gly Gly Arq Phe Val Asp Phe Gln Pro Leu Gly Phe Gly Val Asn Gly Leu Val Leu Ser Ala Val Asp Ser Arg Ala Cys Arg Lys Val Ala Val Lys Lys Ile 70 Ala Leu Ser Asp Ala Arg Ser Met Lys His Ala Leu Arg Glu Ile Lys 90 Ile Ile Arg Arg Leu Asp His Asp Asn Ile Val Lys Val Tyr Glu Val 105 Leu Gly Pro Lys Gly Thr Asp Leu Gln Gly Glu Leu Phe Lys Phe Ser 120 Val Ala Tyr Ile Val Gln Glu Tyr Met Glu Thr Asp Leu Ala Arg Leu 135 Leu Glu Gln Gly Thr Leu Ala Glu Glu His Ala Lys Leu Phe Met Tyr 150 155 Gln Leu Leu Arg Gly Leu Lys Tyr Ile His Ser Ala Asn Val Leu His 170 Arg Asp Leu Lys Pro Ala Asn Ile Phe Ile Ser Thr Glu Asp Leu Val 185 Leu Lys Ile Gly Asp Phe Gly Leu Ala Arg Ile Val Asp Gln His Tyr 200 Ser His Lys Gly Tyr Leu Ser Glu Gly Leu Val Thr Lys Trp Tyr Arg 215 Ser Pro Arg Leu Leu Ser Pro Asn Asn Tyr Thr Lys Ala Ile Asp 230 235 Met Trp Ala Ala Gly Cys Ile Leu Ala Glu Met Leu Thr Gly Arg Met 245 250 Leu Phe Ala Gly Ala His Glu Leu Glu Gln Met Gln Leu Ile Leu Glu 265 Thr Ile Pro Val Ile Arg Glu Glu Asp Lys Asp Glu Leu Leu Arg Val 280 Met Pro Ser Phe Val Ser Ser Thr Trp Glu Val Lys Arg Pro Leu Arg 295 300 Lys Leu Leu Pro Glu Val Asn Ser Glu Ala Ile Asp Phe Leu Glu Lys 310 315 Ile Leu Thr Phe Asn Pro Met Asp Arg Leu Thr Ala Glu Met Gly Leu 330 Gln His Pro Tyr Met Ser Pro Tyr Ser Cys Pro Glu Asp Glu Pro Thr 340 345 Ser Gln His Pro Phe Arg Ile Glu Asp Glu Ile Asp Asp Ile Val Leu 360 Met Ala Ala Asn Gln Ser Gln Leu Ser Asn Trp Asp Thr Cys Ser Ser 375 380 Arg Tyr Pro Val Ser Leu Ser Ser Asp Leu Glu Trp Arg Pro Asp Arg 390 395 Cys Gln Asp Ala Ser Glu Val Gln Arg Asp Pro Arg Ala Gly Ser Ala Pro Leu Ala Glu Asn Val Gln Val Asp Pro Arg Lys Asp Ser His Ser 425 430 Ser Ser Ala Ser Cys Gln Ala Gly Arg Asn Gly Val Ser Arg Tyr Gln 440 445

<210> 1390 <211> 815 <212>Amino acid <213> Homo sapiens

<400> 1390 Met Arg Thr Leu Gly Thr Cys Leu Ala Thr Leu Ala Gly Leu Leu 10 Thr Ala Ala Gly Glu Thr Phe Ser Gly Gly Cys Leu Phe Asp Glu Pro 20 25 Tyr Ser Thr Cys Gly Tyr Ser Gln Ser Glu Gly Asp Asp Phe Asn Trp 40 Glu Gln Val Asn Thr Leu Thr Lys Pro Thr Ser Asp Pro Trp Met Pro 55 Ser Gly Ser Phe Met Leu Val Asn Ala Ser Gly Arg Pro Glu Gly Gln 70 Arg Ala His Leu Leu Leu Pro Gln Leu Lys Glu Asn Asp Thr His Cys Ile Asp Phe His Tyr Phe Val Ser Ser Lys Ser Asn Ser Pro Pro Gly 100 105 Leu Leu Asn Val Tyr Val Lys Val Asn Asn Gly Pro Leu Gly Asn Pro 120 Ile Trp Asn Ile Ser Gly Asp Pro Thr Arg Thr Trp Asn Arg Ala Glu 135 140 Leu Ala Ile Ser Thr Phe Trp Pro Asn Phe Tyr Gln Val Ile Phe Glu 155 150 Val Ile Thr Ser Gly His Gln Gly Tyr Leu Ala Ile Asp Glu Val Lys 165 170 Val Leu Gly His Pro Cys Thr Arg Thr Pro His Phe Leu Arg Ile Gln 185 Asn Val Glu Val Asn Ala Gly Gln Phe Ala Thr Phe Gln Cys Ser Ala 200 Ile Gly Arg Thr Val Ala Gly Asp Arg Leu Trp Leu Gln Gly Ile Asp 215 220 Val Arg Asp Ala Pro Leu Lys Glu Ile Lys Val Thr Ser Ser Arg Arg 230 235 Phe Ile Ala Ser Phe Asn Val Val Asn Thr Thr Lys Arg Asp Ala Gly 250 Lys Tyr Arg Cys Met Ile Arg Thr Glu Gly Gly Val Gly Ile Ser Asn 265 Tyr Ala Glu Leu Val Val Lys Glu Pro Pro Val Pro Ile Ala Pro Pro 280 Gln Leu Ala Ser Val Gly Ala Thr Tyr Leu Trp Ile Gln Leu Asn Ala 295 300 Asn Ser Ile Asn Gly Asp Gly Pro Ile Val Ala Arg Glu Val Glu Tyr 310 315 Cys Thr Ala Ser Gly Ser Trp Asn Asp Arg Gln Pro Val Asp Ser Thr 330 Ser Tyr Lys Ile Gly His Leu Asp Pro Asp Thr Glu Tyr Glu Ile Ser 345 Val Leu Leu Thr Arg Pro Gly Glu Gly Gly Thr Gly Ser Pro Gly Pro 360 Ala Leu Arg Thr Arg Thr Lys Cys Ala Asp Pro Met Arg Gly Pro Arg 380 375 Lys Leu Glu Val Val Glu Val Lys Ser Arg Gln Ile Thr Ile Arg Trp 385 390

Glu Pro Phe Gly Tyr Asn Val Thr Arg Cys His Ser Tyr Asn Leu Thr 405 410 Val His Tyr Cys Tyr Gln Val Gly Gln Glu Gln Val Arg Glu Glu 420 425 Val Ser Trp Asp Thr Glu Asn Ser His Pro Gln His Thr Ile Thr Asn 435 440 Leu Ser Pro Tyr Thr Asn Val Ser Val Lys Leu Ile Leu Met Asn Pro 455 Glu Gly Arg Lys Glu Ser Gln Glu Leu Ile Val Gln Thr Asp Glu Asp 470 475 Leu Pro Gly Ala Val Pro Thr Glu Ser Ile Gln Gly Ser Thr Phe Glu 490 Glu Lys Ile Phe Leu Gln Trp Arg Glu Pro Thr Gln Thr Tyr Gly Val 505 Ile Thr Leu Tyr Glu Ile Thr Tyr Lys Ala Val Ser Ser Phe Asp Pro 520 Glu Ile Asp Leu Ser Asn Gln Ser Gly Arg Val Ser Lys Leu Gly Asn 535 Glu Thr His Phe Leu Phe Phe Gly Leu Tyr Pro Gly Thr Thr Tyr Ser 550 555 Phe Thr Ile Arg Ala Ser Thr Ala Lys Gly Phe Gly Pro Pro Ala Thr 570 Asn Gln Phe Thr Thr Lys Ile Ser Ala Pro Ser Met Pro Ala Tyr Glu 585 Leu Glu Thr Pro Leu Asn Gln Thr Asp Asn Thr Val Thr Val Met Leu 600 Lys Pro Ala His Ser Arg Gly Ala Pro Val Ser Val Tyr Gln Ile Val 615 620 Val Glu Glu Glu Arg Pro Arg Arg Thr Lys Lys Thr Thr Glu Ile Leu 630 635 Lys Cys Tyr Pro Val Pro Ile His Phe Gln Asn Ala Ser Leu Leu Asn 645 650 Ser Gln Tyr Tyr Phe Ala Ala Glu Phe Pro Ala Asp Ser Leu Gln Ala 660 665 670 Ala Gln Pro Phe Thr Ile Gly Asp Asn Lys Thr Tyr Asn Gly Tyr Trp 680 Asn Thr Pro Leu Leu Pro Tyr Lys Ser Tyr Arg Ile Tyr Phe Gln Ala 695 700 Ala Ser Arg Ala Asn Gly Glu Thr Lys Ile Asp Cys Val Gln Val Ala 710 715 Thr Lys Gly Ala Ala Thr Pro Lys Pro Val Pro Glu Pro Glu Lys Gln 725 -730 Thr Asp His Thr Val Lys Ile Ala Gly Val Ile Ala Gly Ile Leu Leu 740 745 Phe Val Ile Ile Phe Leu Gly Val Val Leu Val Met Lys Lys Arg Leu 760 Tyr Lys His Gly Ala Ser Ile Cys Ser Ala Ser Gly Glu Ala Ser Gly 775 780 Ser Phe Gln Ser Trp Arg Lys Ala Lys His Lys Gln Ala Cys Pro Met 790 795 800 Ala Arg Ala Gly Ala Arg Glu Arg Ala Gly Gly Cys Leu Lys Leu 810

<210> 1391 <211> 142 <212>Amino acid <213> Homo sapiens

Gly Ile Arg Gln Leu Leu Gln Leu Ser Arg Ala Ser Met Ala Ala Arg 10 Lys Ser Trp Thr Ala Leu Arg Leu Cys Ala Thr Val Val Val Leu Asp 25 Met Val Val Cys Lys Gly Phe Val Gln Asp Leu Asp Glu Ser Phe Lys Glu Asn Arg Asn Asp Asp Ile Trp Leu Val His Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Leu Glu Pro Ile Trp Asn Glu Ala Gly Leu 70 Glu Met Lys Ser Ile Gly Ser Pro Val Lys Ala Gly Lys Met Asp Ala 85 90 Thr Ser Tyr Ser Ser Ile Ala Ser Glu Phe Gly Val Arg Gly Tyr Pro 100 105 Thr Ile Lys Leu Ala Leu Ile Arg Pro Leu Pro Ser Gln Gln Met Phe 120 Glu His Met His Lys Arg His Arg Val Phe Phe Val Tyr Val 130 135

<210> 1392 <211> 282 <212>Amino acid <213> Homo sapiens

<400> 1392 Gly Leu Val Ile Val Ile Ser His Phe Ser Pro Ser Pro Gly Leu Leu Pro Ala Thr Gln Ser Pro Ala Met Ser Asp Pro Ile Thr Leu Asn Val Gly Gly Lys Leu Tyr Thr Thr Ser Leu Ala Thr Leu Thr Ser Phe Pro 40 Asp Ser Met Leu Gly Ala Met Phe Ser Gly Lys Met Pro Thr Lys Arg 55 Asp Ser Gln Gly Asn Cys Phe Ile Asp Arg Asp Gly Lys Val Phe Arg 70 Tyr Ile Leu Asn Phe Leu Arg Thr Ser His Leu Asp Leu Pro Glu Asp 90 Phe Gln Glu Met Gly Leu Leu Arg Arg Glu Ala Asp Phe Tyr Gln Val 105 Gln Pro Leu Ile Glu Ala Leu Gln Glu Lys Glu Val Glu Leu Ser Lys 120 Ala Glu Lys Asn Ala Met Leu Asn Ile Thr Leu Asn Gln Arg Val Gln 135 140 Thr Val His Phe Thr Val Arg Glu Ala Pro Gln Ile Tyr Ser Leu Ser 150 155 Ser Ser Ser Met Glu Val Phe Asn Ala Asn Ile Phe Ser Thr Ser Cys 165 170 Leu Phe Leu Lys Leu Leu Gly Ser Lys Leu Phe Tyr Cys Ser Asn Gly 180 185 Asn Leu Ser Ser Ile Thr Ser His Leu Gln Asp Pro Asn His Leu Thr 200 Leu Asp Trp Val Ala Asn Val Glu Gly Leu Pro Glu Glu Glu Tyr Thr 215 220 Lys Gln Asn Leu Lys Arg Leu Trp Val Val Pro Ala Asn Lys Gln Ile 230 235 Asn Ser Phe Gln Val Phe Val Glu Glu Val Leu Lys Ile Ala Leu Ser 245 250 Asp Gly Phe Cys Ile Asp Ser Ser His Pro His Ala Leu Asp Phe Met 265

<210> 1393 <211> 308 <212>Amino acid <213> Homo sapiens

<400> 1393 Ser Cys Ala Asp Asn Leu Val Ala Ala Ser Gly Gly Cys Trp Phe Val Leu Gly Glu Arg Arg Ala Gly Ser Leu Leu Ser Ala Ser Tyr Gly Thr 20 25 Phe Ala Met Pro Gly Met Val Leu Phe Gly Arg Arg Trp Ala Ile Ala Ser Asp Asp Leu Val Phe Pro Gly Phe Phe Glu Leu Val Val Arg Val 55 60 Leu Trp Trp Ile Gly Ile Leu Thr Leu Tyr Leu Met His Arg Gly Lys 70 Leu Asp Cys Ala Gly Gly Ala Leu Leu Ser Ser Tyr Leu Ile Val Leu 85 90 Met Ile Leu Leu Ala Val Val Ile Cys Thr Val Ser Ala Ile Met Cys 105 Val Ser Met Arg Gly Thr Ile Cys Asn Pro Gly Pro Arg Lys Ser Met 120 Ser Lys Leu Leu Tyr Ile Arg Leu Ala Leu Phe Phe Pro Glu Met Val 135 140 Trp Ala Ser Leu Gly Ala Ala Trp Val Ala Asp Gly Val Gln Cys Asp 150 155 Arg Thr Val Val Asn Gly Ile Ile Ala Thr Val Val Val Ser Trp Ile 165 175 170 Ile Ile Ala Ala Thr Val Val Ser Ile Ile Val Phe Asp Pro Leu 180 185 Gly Gly Lys Met Ala Pro Tyr Ser Ser Ala Gly Pro Ser His Leu Asp 200 Ser His Asp Ser Ser Gln Leu Leu Asn Gly Leu Lys Thr Ala Ala Thr 215 · 220 Ser Val Trp Glu Thr Arg Ile Lys Leu Leu Cys Cys Cys Ile Gly Lys 230 235 Asp Asp His Thr Arg Val Ala Phe Ser Ser Thr Ala Glu Leu Phe Ser 245 250 Thr Tyr Phe Ser Asp Thr Asp Leu Val Pro Ser Asp Ile Ala Ala Gly 265 Leu Ala Leu Leu His Gln Gln Gln Asp Asn Ile Arg Asn Asn Gln Asp 275 280 Leu Pro Arg Trp Ser Ala Met Pro Gln Gly Ala Pro Arg Lys Leu Ile 295 300 Trp Met Gln Asn 308

<210> 1394 <211> 238 <212>Amino acid <213> Homo sapiens

<400> 1394 Phe Arg Ala Ala Thr Ala Ala Lys Gly Asn Gly Gly Gly Gly Arg Ala Gly Ala Gly Asp Ala Ser Gly Thr Arg Lys Lys Gly Pro Gly Pro Leu Ala Thr Ala Tyr Leu Val Ile Tyr Asn Val Val Met Thr 40 Ala Gly Trp Leu Val Ile Ala Val Gly Leu Val Arg Ala Tyr Leu Ala 55 Lys Gly Ser Tyr His Ser Leu Tyr Tyr Ser Ile Glu Lys Pro Leu Lys 70 75 Phe Phe Gln Thr Gly Ala Leu Leu Glu Ile Leu His Cys Ala Ile Gly 90 Ile Val Pro Ser Ser Val Val Leu Thr Ser Phe Gln Val Met Ser Arg 105 Val Phe Leu Ile Trp Ala Val Thr His Ser Val Lys Glu Val Gln Ser 120 Glu Asp Ser Val Leu Phe Val Ile Ala Trp Thr Ile Thr Glu Ile Ile 135 140 Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asn His Leu Pro Tyr Leu 150 155 Ile Lys Arg Ala Arg Tyr Thr Leu Phe Ile Val Leu Tyr Pro Met Gly 170 Val Ser Gly Glu Leu Leu Thr Ile Tyr Ala Ala Leu Pro Phe Val Arg 180 185 190 Gln Ala Gly Leu Tyr Ser Ile Ser Leu Pro Asn Ser Thr Lys Lys Ile 195 200 205 Phe Leu Ile Ser Gln Val Trp Trp His Met Leu Ala Val Ser Ala Asp 215 220 Ala Lys Ala Ala Glu Met Pro Ala Val Leu Lys Pro Gly Pro 230

<210> 1395 <211> 231 <212>Amino acid <213> Homo sapiens

<400> 1395 Met Leu Thr Gly Val Gly Cys Leu Val Ser Ser Glu Ser Leu Ser Cys 10 Val Gln Cys Asn Ser Trp Glu Lys Ser Cys Val Asn Ser Ile Ala Ser Glu Cys Pro Ser His Ala Asn Thr Ser Cys Ile Ser Ser Ser Ala Ser Ser Ser Leu Glu Thr Pro Val Arg Leu Tyr Gln Asn Met Phe Cys Ser 55 Ala Glu Asn Cys Ser Glu Glu Thr His Ile Thr Ala Phe Thr Val His 70 Val Ser Ala Glu Glu His Phe His Phe Val Ser Gln Cys Cys Glu Gly 90 Lys Glu Cys Ser Asn Thr Ser Asp Ala Leu Asp Pro Pro Leu Lys Asn 105 Val Ser Ser Asn Ala Glu Cys Pro Ala Cys Tyr Glu Ser Asn Gly Thr 120 Ser Cys Arg Gly Lys Pro Trp Lys Cys Tyr Glu Glu Glu Gln Cys Val 135 140 Phe Leu Val Ala Glu Leu Lys Asn Asp Ile Glu Ser Lys Ser Leu Val 155

<210> 1396 <211> 216 <212>Amino acid <213> Homo sapiens

<400> 1396 Val Pro Ala Arg Arg Arg Ala Met Glu Ile Gly Thr Glu Ile Ser Arg 10 Lys Ile Arg Ser Ala Ile Lys Gly Lys Leu Gln Glu Leu Gly Ala Tyr 25 Val Asp Glu Glu Leu Pro Asp Tyr Ile Met Val Met Val Ala Asn Lys 40 Lys Ser Gln Asp Gln Met Thr Glu Asp Leu Ser Leu Phe Leu Gly Asn Asn Thr Ile Arg Phe Thr Val Trp Leu His Gly Val Leu Asp Lys Leu 75 Arg Ser Val Thr Thr Glu Pro Ser Ser Leu Lys Ser Ser Asp Thr Asn 85 90 Ile Phe Asp Ser Asn Val Pro Ser Asn Lys Ser Asn Phe Ser Arg Gly 100 105 Asp Glu Arg Arg His Glu Ala Ala Val Pro Pro Leu Ala Ile Pro Ser 120 Ala Arg Pro Glu Lys Arg Asp Ser Arg Val Ser Thr Ser Ser Gln Glu 135 Ser Lys Thr Thr Asn Val Arg Gln Thr Tyr Asp Asp Gly Ala Ala Thr 150 . 155 Arg Leu Met Ser Thr Val Lys Pro Leu Arg Glu Pro Ala Pro Ser Glu 170 175 Asp Val Ile Asp Ile Lys Pro Glu Pro Asp Asp Leu Ile Asp Glu Asp 185 Leu Asn Phe Val Gln Glu Lys Pro Leu Ser Gln Lys Lys Pro Thr Val _. 195 200 Thr Leu Thr Tyr Gly Ser Ser Arg 210 215 216

<210> 1397 <211> 135 <212>Amino acid <213> Homo sapiens

His Leu Gly Leu Gln Met Leu Leu Leu Ala Leu Asn Trp Leu Arg Pro 25 Ser Leu Ser Leu Glu Leu Val Pro Tyr Thr Pro Gln Ile Thr Ala Trp 40 Asp Leu Glu Gly Lys Val Thr Ala Thr Thr Phe Ser Leu Glu Gln Pro 55 60 Arg Cys Val Phe Asp Gly Leu Ala Ser Ala Ser Asp Thr Val Trp Leu 75 Val Val Ala Phe Ser Asn Ala Ser Arg Gly Phe Gln Asn Pro Glu Thr 90 Leu Ala Asp Ile Pro Ala Ser Pro Gln Leu Leu Thr Asp Gly His Tyr 100 105 Met Thr Leu Pro Leu Ser Pro Asp Gln Leu Pro Cys Gly Asp Pro Met 115 120 Ala Gly Ser Gly Ser Ala Pro

<210> 1398 <211> 41 <212>Amino acid <213> Homo sapiens

<210> 1399 <211> 151 <212>Amino acid <213> Homo sapiens

<400> 1399 Lys Ser Leu Pro Leu Gln Lys His Pro Lys Pro Ser Cys Gln Glu Asp 10 Gln Gly Leu Gly Arg Gly Ser Leu Ser Gly His Ser Pro Leu Thr Leu 25 Leu Thr Phe Leu Thr Ser Cys Ala Leu Gly Asp Gln Gln Leu Leu Pro Pro Arg Thr Ser Gly Ser Leu Cys Gln Glu Ser Met Ser Glu Gln Ser Cys Gln Met Ser Glu Leu Arg Leu Leu Leu Leu Gly Lys Cys Arg Ser Gly Lys Ser Ala Thr Gly Asn Ala Ile Leu Gly Lys His Val Phe Lys 90 Ser Lys Phe Ser Asp Gln Thr Val Ile Lys Met Cys Gln Arg Glu Ser 105 Trp Val Leu Arg Glu Arg Lys Val Val Val Ile Asp Thr Pro Asp Leu 120 125 Phe Ser Ser Ile Ala Cys Ala Glu Asp Lys Gln Arg Asn Ile Gln His

Leu Leu Glu Leu Ser Ala Pro 145 150 151

> <210> 1400 <211> 324 <212>Amino acid <213> Homo sapiens

<400> 1400 Phe Val Glu Thr Thr Val Ser Val Gln Ser Ala Glu Ser Ser Asp Ala 10 Leu Ser Trp Ser Arg Leu Pro Arg Ala Leu Ala Ser Val Gly Pro Glu 25 Glu Ala Arg Ser Gly Ala Pro Val Gly Gly Gly Arg Trp Gln Leu Ser Asp Arg Val Glu Gly Gly Ser Pro Thr Leu Gly Leu Leu Gly Gly Ser 55 Pro Ser Ala Gln Pro Gly Thr Gly Asn Val Glu Ala Gly Ile Pro Ser 65 70 Gly Arg Met Leu Glu Pro Leu Pro Cys Trp Asp Ala Ala Lys Asp Leu 85 90 Lys Glu Pro Gln Cys Pro Pro Gly Asp Arg Val Gly Val Gln Pro Gly 105 Asn Ser Arg Val Trp Gln Gly Thr Met Glu Lys Ala Gly Leu Ala Trp 120 Thr Arg Gly Thr Gly Val Gln Ser Glu Gly Thr Trp Glu Ser Gln Arg 130 135 140 Gln Asp Ser Asp Ala Leu Pro Ser Pro Glu Leu Leu Pro Gln Asp Gln 150 155 Asp Lys Pro Phe Leu Arg Lys Ala Cys Ser Pro Ser Asn Ile Pro Ala 170 Val Ile Ile Thr Asp Met Gly Thr Gln Glu Asp Gly Ala Leu Glu Glu 180 185 Thr Gln Gly Ser Pro Arg Gly Asn Leu Pro Leu Arg Lys Leu Ser Ser 195 200 205 Ser Ser Ala Ser Ser Thr Gly Phe Ser Ser Ser Tyr Glu Asp Ser Glu 215 Glu Asp Ile Ser Ser Asp Pro Glu Arg Thr Leu Asp Pro Asn Ser Ala 230 235 Phe Leu His Thr Leu Asp Gln Gln Lys Pro Arg Val Val Glu Ser Arg 245 250 Ser Val Thr Gln Ala Gly Val Gln Trp His Asp Ile Gly Ser Leu Gln 260 265 Pro Leu Pro Pro Trp Ile Gln Ala Ile Leu His Ala Ser Ala Phe Arg 280 Ile Ala Gly Thr Thr Gly Ala Cys His His Ala Arg Ile Ile Phe Gly 295 300 Phe Leu Val Glu Arg Gly Phe His His Val Gly Gln Asp Gly Leu Tyr 310 315 Leu Leu Ile Leu 324

<210> 1401 <211> 76 <212>Amino acid <213> Homo sapiens

<220>

<221> misc_feature <222> (1)...(76) <223> X = any amino acid or stop code

<210> 1402 <211> 102 <212>Amino acid <213> Homo sapiens

<210> 1403

<211> 124
<212>Amino acid
. <213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(124)
<223> X = any amino acid or stop code

<210> 1404 <211> 136 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(136) <223> X = any amino acid or stop code

<400> 1404 Asn Ala Glu His Pro Gly Met Asp Arg His Asp Leu Cys Gln Lys Ala 10 Lys Leu Ala Glu His Ala Glu Arg Asp Asp Met Ala Ala Cys Met 25 Lys Thr Val Thr Asp Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn 40 Leu Leu Ser Asp Ala His Thr Asn Ala Val Xaa Ala Arg Arg Ser Ser 55 Trp Met Gly Ala Xaa Arg Ile Glu Gln Lys Thr Glu Gly Ala Asp Thr 70 Gln Gln Gln Met Ala Pro Asp Cys Arg Glu Ile Phe Ala Thr Glu Leu 85 90 Arg Asp Ile Cys Asp Asp Val Leu Ser Leu Leu Glu Lys Leu Leu Ile 105 110 Pro Asn Ala Ser His Ala Xaa Ser Leu Val Tyr Tyr Leu His Met Ile 120 Gly Asp Tyr Tyr Arg Tyr Trp Leu 135 136

<210> 1405 <211> 110 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(110) <223> X = any amino acid or stop code

MISSING AT THE TIME OF PUBLICATION

Gly Asn Asp Tyr Ser Leu Gly Leu Thr Pro Thr Gly Val Leu Val Phe 90 Glu Gly Asp Thr Lys Ile Gly Leu Phe Phe Trp Pro Lys Ile Thr Arg 105 Leu Asp Phe Lys Lys Asn Lys Leu Thr Leu Val Val Glu Asp Asp 120 Asp Gln Gly Lys Glu Gln Glu His Thr Phe Val Phe Arg Leu Asp His 135 Pro Lys Ala Cys Lys His Leu Trp Lys Cys Ala Val Glu His His Ala 155 Phe Phe Arg Leu Arg Gly Pro Val Gln Lys Ser Ser His Arg Ser Gly 165 170 Phe Ile Arg Leu Gly Ser Arg Phe Arg Tyr Ser Gly Lys Thr Glu Tyr 180 185 Gln Thr Thr Lys Thr Asn Lys Ala Arg Arg Ser Thr Ser Phe Glu Arg 200 205 Arg Pro Ser Lys Arg Tyr Ser Arg Arg Thr Leu Gln Met Lys Ala Cys 215 Ala Thr Lys Pro Glu Glu Leu Ser Val His Asn Asn Val Ser Thr Gln 230 235 Ser Asn Gly Ser Gln Gln Ala Trp Gly Met Arg Ser Ala Leu Pro Val 245 250 Ser Pro Ser Ile Ser Ser Ala Pro Val Pro Val Glu Ile Glu Asn Leu 265 Pro Gln Ser Pro Gly Thr Asp Gln His Asp Arg Lys Trp Leu Ser Ala 280 Ala Ser Asp Cys Cys Gln Arg Gly Gly Asn Gln Trp Asn Thr Arg Ala 295 Leu 305

<210> 1408 <211> 92 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1) ... (92) <223> X = any amino acid or stop code

<210> 1409 <211> 169 <212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(169)

<223> X = any amino acid or stop code

<400> 1409 Ala Glu Gly Leu Gly Ser Trp Ala Val Trp Ala Gly Leu Gly Trp Ala 10 Gly Arg His Met Glu Ala Gly Gly Ala Thr Gly Ala Leu Gly Val Gly 20 Ser Lys Leu Pro Ser Ala Phe Cys Phe Pro Gly Ser Ser Val Ala Met 40 Asp Met Phe Gln Lys Val Glu Lys Ile Gly Glu Gly Thr Tyr Gly Val 55 Val Tyr Lys Ala Lys Asn Arg Glu Thr Gly Gln Leu Val Ala Leu Lys 70 75 Lys Ile Arg Leu Asp Leu Xaa Val Leu Gly Arg Pro Leu Ser Tyr Pro 90 Pro Trp Ala Ile Thr Trp Ala Leu Pro Asp Pro Phe Pro Leu Ser 105 Trp Ser Pro Arg Leu Thr Pro Leu Gly Ala Ala Gln Gln Pro Leu Pro 120 Val Leu Ser Pro Val His Cys Leu Leu Thr Ser Leu Cys Arg Gly Pro 135 140 Asp Cys Gly Val Trp Trp Met Thr Cys Gln Gly Ala Gln Val Ser Ile

150

169

<210> 1410 <211> 146 <212>Amino acid <213> Homo sapiens

Ala Gly Ala Leu Val Ile Leu Trp Gly 165

<400> 1410 Leu Cys Val Ser Val Leu Cys Ser Phe Ser Tyr Leu Gln Asn Gly Trp 5 10 Thr Ala Ser Asp Pro Val His Gly Tyr Trp Phe Arg Ala Gly Asp His 20 25 Val Ser Arg Asn Ile Pro Val Ala Thr Asn Asn Pro Val Arg Ala Val 40 Gln Glu Glu Thr Arg Asp Arg Phe His Leu Leu Gly Asp Pro Gln Asn 55 60 Lys Asp Cys Thr Leu Ser Ile Arg Asp Thr Arg Glu Ser Asp Ala Gly 70 Thr Tyr Val Phe Cys Val Glu Arg Gly Asn Met Lys Trp Asn Tyr Lys 85 90 Tyr Asp Gln Leu Ser Val Asn Val Thr Ala Ser Gln Asp Leu Leu Ser 100 105 Arg Tyr Arg Leu Glu Val Pro Glu Ser Val Thr Val Gln Glu Gly Leu 120 Cys Val Ser Val Pro Trp Gln Cys Pro Leu Pro Pro Leu Gln Leu Asp 135 140

Cys Leu 145 146

> <210> 1411 <211> 250 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(250) <223> X = any amino acid or stop code

<400> 1411 Gln Leu Gln Leu Cys Gln Asn Cys Thr Lys Arg Gly Glu Cys His Cys 10 Val Pro Phe Asp Thr Tyr Ile Lys Thr Lys Lys Glu Lys Lys Arg Leu Ser Val Leu Pro Pro Thr Arg Leu Met Glu Ala Arg Phe Ser Pro Ile 40 Asn Gln Ile Leu Pro Trp Cys Arg Gln Asp Leu Ala Ile Ser Ile Ser 55 Lys Ala Ile Asn Thr Gln Glu Ala Pro Val Lys Glu Lys His Ala Arg 70 75 Arg Ile Ile Leu Gly Thr His His Glu Lys Gly Ala Phe Thr Phê Trp 85 90 Ser Tyr Ala Ile Gly Leu Pro Leu Pro Ser Ser Ser Ile Leu Ser Trp 100 105 Lys Phe Cys His Val Leu His Lys Val Leu Arg Asp Gly His Pro Asn 120 125 Val Leu His Asp Cys Gln Arg Tyr Arg Ser Asn Ile Arg Glu Ile Gly 135 140 Asp Leu Trp Gly His Leu His Asp Arg Tyr Gly Gln Leu Val Asn Val 150 155 Tyr Thr Lys Leu Leu Thr Lys Ile Ser Phe His Leu Lys His Pro 165 170 Gln Phe Pro Ala Gly Leu Glu Val Thr Asp Glu Val Leu Glu Lys Ala 185 190 Ala Gly Thr Asp Val Asn Asn Met Xaa Val Thr Leu His Gly Tyr Met 200 Ala Ser Ser Pro Arg Leu Pro His Ser Phe Leu Pro Arg Leu Thr Pro 215 220 Arg Arg Pro His Gly Ala Val Gly Leu Asn Glu Ser Val Ala Leu Leu 230 235 Val Asp Ala His Ala Pro Arg Asp Arg Gly 245

<210> 1412 <211> 169 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1) ... (169) <223> X = any amino acid or stop code

<400> 1412 Ala Ala Pro His Arg Met Pro Arg Ala Pro His Phe Met Pro Leu Leu 10 Leu Leu Leu Leu Leu Ser Leu Pro His Thr Gln Ala Ala Phe Pro 20 25 Gln Asp Pro Leu Pro Leu Leu Ile Ser Asp Leu Gln Gly Thr Ser Pro 40 Leu Ser Trp Leu Pro Ser Leu Glu Asp Asp Ala Val Ala Ala Xaa Leu 55 Gly Leu Asp Phe Gln Arg Phe Leu Thr Leu Asn Arg Thr Leu Leu Val 70 75 Ala Ala Arg Asp His Val Phe Ser Phe Asp Leu Gln Ala Glu Glu 85 90 Gly Glu Gly Leu Val Pro Asn Lys Tyr Leu Thr Trp Arg Ser Gln Asp 100 . 105 Val Glu Asn Cys Ala Val Arg Xaa Lys Leu Thr Leu Asn Arg Thr Leu 120 Leu Val Ala Ala Arg Asp His Val Phe Ser Phe Asp Leu Gln Ala Glu 135 140 Glu Glu Gly Glu Gly Leu Val Pro Asn Lys Tyr Leu Thr Trp Arg Ser 150 155 Gln Asp Val Glu Asn Cys Ala Val Arg 165

<210> 1413 <211> 131 <212>Amino acid <213> Homo sapiens <220> <221> misc feature

<222> (1) ... (131)

<223> X = any amino acid or stop code

<400> 1413 His Leu Val Pro Lys Thr Arg Gly Arg Gly Thr Pro Ser Gly Asp Gln 5 10 Ser Pro Val Leu Thr Leu Thr Pro Xaa Gly Asp Pro Pro Thr Ile Leu Gly Pro Gln Thr Asn Gln Pro Lys Glu His Leu Thr Asn Phe Lys Ser 35 40 Gly Lys Arg Ser Phe His Ser Leu Leu Gln Pro Leu Leu Leu Leu 55 His Pro Ser Ile Ser Pro Phe Leu Asn Phe Gly Ser Phe Pro Phe Leu 70 Val Glu Thr Glu Glu Thr Cys Phe Ile His Lys Leu Lys Thr Pro Ala 90 Leu Val Thr Pro Asp Ser Leu Pro Leu Val Phe Asn His Cys Gly Asp 105 110 Ala Cys Leu Ile Ile His Pro His Phe Arg Asp Val Glu Phe His His 120

Thr Gly Asn 130 131

<210> 1414

<211> 365 <212>Amino acid <213> Homo sapiens

<400> 1414 Cys Cys Ser Thr Lys Asn Ile Ser Gly Asp Lys Ala Cys Asn Leu Met 10 Ile Phe Asp Thr Arg Lys Thr Ala Arg Gln Pro Asn Cys Tyr Leu Phe 25 Phe Cys Pro Asn Glu Glu Ala Cys Pro Leu Lys Pro Ala Lys Gly Leu 40 Met Ser Tyr Arg Ile Ile Thr Asp Phe Pro Ser Leu Thr Arg Asn Leu 55 Pro Ser Gln Glu Leu Pro Gln Glu Asp Ser Leu Leu His Gly Gln Phe 70 75 Ser Gln Ala Val Thr Pro Leu Ala His His His Thr Asp Tyr Ser Lys 85 , 90 Pro Thr Asp Ile Ser Trp Arg Asp Thr Leu Ser Gln Lys Phe Gly Ser 105 Ser Asp His Leu Glu Lys Leu Phe Lys Met Asp Glu Ala Ser Ala Gln 120 Leu Leu Ala Tyr Lys Glu Lys Gly His Ser Gln Ser Ser Gln Phe Ser 135 140 Ser Asp Gln Glu Ile Ala His Leu Leu Pro Glu Asn Val Ser Ala Leu 150 155 Pro Ala Thr Val Ala Val Ala Ser Pro His Thr Thr Ser Ala Thr Pro 165 170 Lys Pro Ala Thr Leu Leu Pro Thr Asn Ala Ser Val Thr Pro Ser Gly 180 185 Thr Ser Gln Pro Gln Leu Ala Thr Thr Ala Pro Pro Val Thr Thr Val 195 200 205 Thr Ser Gln Pro Pro Thr Thr Leu Ile Ser Thr Val Phe Thr Arg Ala 215 220 Ala Ala Thr Leu Gln Ala Met Ala Thr Thr Ala Val Leu Thr Thr 230 235 240 Phe Gln Ala Pro Thr Asp Ser Lys Gly Ser Leu Glu Thr Ile Pro Phe 245 250 Thr Glu Ile Ser Asn Leu Thr Leu Asn Thr Gly Asn Val Tyr Asn Pro 265 270 Thr Ala Leu Ser Met Ser Asn Val Glu Ser Ser Thr Met Asn Lys Thr 280 Ala Ser Trp Glu Gly Arg Glu Ala Ser Pro Gly Ser Ser Ser Gln Gly 295 Ser Val Pro Glu Asn Gln Tyr Gly Leu Pro Phe Glu Lys Trp Leu Leu 310 315 Ile Gly Ser Leu Leu Phe Gly Val Leu Phe Leu Val Ile Gly Leu Val 325 330 Leu Leu Gly Arg Ile Leu Ser Glu Ser Leu Arg Arg Lys Arg Tyr Ser 345 Arg Leu Asp Tyr Leu Ile Asn Gly Ile Tyr Val Asp Ile 360

<210> 1415 <211> 148 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature

<222> (1)...(148) <223> X = any amino acid or stop code

<400> 1415 Ile Phe Ala Gly Ser Gly Val Met Arg Leu Lys Ile Ser Leu Leu Lys Glu Pro Lys His Gln Glu Leu Val Ser Cys Val Gly Trp Thr Thr Ala 20 Glu Glu Leu Tyr Ser Cys Ser Asp Asp His His Ile Val Lys Trp Asn Leu Leu Thr Ser Glu Thr Thr Gln Ile Val Lys Leu Pro Asp Asp Ile 55 Tyr Pro Ile Asp Phe His Trp Phe Pro Lys Ser Leu Gly Val Lys 70 Gln Thr His Ala Glu Ser Phe Val Leu Thr Ser Ser Asp Gly Lys Phe 85 90 His Leu Ile Ser Lys Leu Gly Arg Val Glu Lys Ser Val Glu Ala His 105 Cys Gly Ala Val Leu Ala Gly Arg Trp Asn Tyr Glu Gly Thr Ala Leu 120 125 Val Thr Val Gly Glu Asp Gly Gln Ile Xaa Ile Trp Ser Lys Thr Gly 135 Met Leu Ile Ser

<210> 1416
<211> 122
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(122)
<223> X = any amino acid or stop code

<400> 1416 Ala Arg Ala Thr Thr Lys Arg His Phe Ile Leu Leu Phe Leu Phe Phe 10 Leu Arg Arg Cys Leu Phe Leu Ser Pro Arg Met Glu Cys Asn Gly Ala 20 25 Ile Leu Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Ser Ser 40 Ala Ser Ala Ser Xaa Val Ala Gly Ile Thr Asp Val Arg His His Ala Gln Leu Ile Leu Phe Val Phe Leu Val Glu Thr Gly Phe His Arg Val Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp Leu Leu Thr Ser 90 Ala Ser Gln Ser Ala Gly Ile Ile Met Gly Ile Ser His Cys Ala Gln 105 Pro Lys Lys Ala Phe Xaa Thr Lys Thr Phe 115 120

<210> 1417

<211> 138
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(138)
<223> X = any amino acid or stop code

<400> 1417 Glu Ala Gly Ser Asn Asp Asp Leu Ala Thr Xaa Lys Thr Cys Gly Arg - 5 10 Ala Arg Pro Ser Ser Arg Ser Arg Gln Phe Gly Ser Arg Val Trp Asn 20 His Arg Gln Gly Val Arg Ser Ser Pro Gly Glu Gly Ala Gly Ser Arg 35 40 Ser Pro Cys Arg Arg Arg His Arg Arg Lys His Arg Arg Asn Val Gln 55 Ser Pro Xaa Arg Arg Arg Ser Arg Ser Cys Ser Arg Arg Ser Gly Arg 70 Cys Ser Val Ala Leu Leu Gly Ala Cys Pro Val Ala Gly His Ser Arg 90 Gly Lys Val Val Cys Arg Arg Ala His Ala Ile Thr Gln Arg Arg 105 Cys Cys Gly Phe Asp Pro Met Val His Pro Lys Glu His Arg Gly Xaa 120 Arg Glu Arg Ser Arg Lys Trp Ser Arg Ser 130 135 138

<211> 92 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(92) <223> X = any amino acid or stop code

 400> 1418

 Ala Thr Ala Pro Gly Leu Phe Asn Phe Phe Xaa Phe Leu Phe Gln Cys 1

 Arg Glu Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala 20

 Glu Phe Ser Lys Lys Cys Ser Gly Arg Trp Lys Thr Met Ser Ser Lys 35

 Glu Lys Phe Lys Phe Gly Glu Met Ala Lys Asp Glu Val Cys Tyr 55

 Asp Arg Glu Met Lys Asp Trp Gly Pro Ala Lys Gly Gly Lys Lys So Asp Pro Asn Ala Pro Lys Asp Pro Pro Ser Gly Phe

<210> 1419

<210> 1418

<211> 44 <212>Amino acid <213> Homo sapiens

<400> 1419

<210> 1420 <211> 91 <212>Amino acid <213> Homo sapiens

<400> 1420

<210> 1421

<211> 190
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(190)
<223> X = any amino acid or stop code

<400> 1421

Glu Leu Glu Pro Trp Gln Lys Lys Val Lys Glu Val Glu Asp Asp Asp 70 75 Asp Asp Glu Pro Ile Phe Val Gly Glu Ile Ser Ser Lys Pro Ala 85 90 Ile Ser Asn Ile Leu Asn Arg Val Asn Pro Ser Ser Tyr Ser Arg Gly 105 110 Leu Lys Asn Gly Ala Leu Ser Arg Gly Ile Thr Ala Ala Phe Lys Pro 120 Thr Ser Gln His Tyr Thr Asn Pro Thr Ser Asn Pro Val Pro Ala Ser 135 140 Pro Ile Asn Phe His Pro Glu Ser Arg Ser Ser Asp Ser Ser Val Ile 150 155 160 Gly Gln Pro Phe Ser Lys Pro Val Ser Val Ser Lys Thr Ile Arg Pro 170 Ala Gln Gly Ser Ile Gly Cys Cys Leu Ser Ile Ser Thr Val

<210> 1422 <211> 207 <212>Amino acid <213> Homo sapiens

<400> 1422 Cys Phe Ser Leu Glu Asp Ile Leu Asn Phe Phe Leu Gln Gly Phe Ser 5 10 Ala Gly Leu Phe Ala Phe Tyr His Asp Lys Asp Gly Asn Pro Leu Thr 25 Ser Arg Phe Ala Asp Gly Leu Pro Pro Phe Asn Tyr Ser Leu Gly Leu 40 Tyr Gln Trp Ser Asp Lys Val Val Arg Lys Val Glu Arg Leu Trp Asp 55 Val Arg Asp Asn Lys Ile Val Arg His Thr Val Tyr Leu Leu Val Thr 70 75 Pro Arg Val Val Glu Glu Ala Arg Lys His Phe Asp Cys Pro Val Leu 85 90 Glu Gly Met Glu Leu Glu Asn Gln Gly Gly Val Gly Thr Glu Leu Asn 100 105 110 His Trp Glu Lys Arg Leu Leu Glu Asn Glu Ala Met Thr Gly Ser His 120 Thr Gln Asn Arg Val Leu Ser Arg Ile Thr Leu Ala Leu Met Glu Asp 135 Thr Gly Arg Gln Met Leu Ser Pro Tyr Cys Asp Thr Leu Arg Ser Asn 150 155 Pro Leu Gln Leu Thr Cys Arg Gln Asp Gln Arg Ala Val Ala Val Cys 165 170 Asn Leu Gln Lys Phe Pro Lys Pro Leu Pro Gln Glu Tyr Gln Tyr Phe 180 185 Asp Glu Leu Ser Gly Ile Pro Ala Glu Asp Leu Pro Tyr Tyr Gly 200 205 207

<210> 1423 <211> 423 <212>Amino acid <213> Homo sapiens

<400> 1423 Ala Ala Arg Arg Arg Gln Leu Val Ser Arg Arg Thr Ala Glu 10 Tyr Pro Arg Arg Arg Ser Ser Pro Ser Ala Arg Pro Pro Asp Val 25 Pro Gly Gln Gln Pro Lys Ala Ala Lys Ser Pro Ser Pro Val Gln Gly 40 Lys Lys Ser Pro Arg Leu Leu Cys Ile Glu Lys Val Thr Thr Asp Lys Asp Pro Lys Glu Glu Lys Glu Glu Glu Asp Asp Ser Ala Leu Pro Gln Glu Val Ser Ile Ala Ala Ser Arg Pro Ser Arg Gly Trp Arg Ser Ser 85 90 Arg Thr Ser Val Ser Arg His Arg Asp Thr Glu Asn Thr Arg Ser Ser 100 105 Arg Ser Lys Thr Gly Ser Leu Gln Leu Ile Cys Lys Ser Glu Pro Asn 120 125 Thr Asp Gln Leu Asp Tyr Asp Val Gly Glu Glu His Gln Ser Pro Gly 135 140 Gly Ile Ser Ser Glu Glu Glu Glu Glu Glu Glu Glu Met Leu Ile 150 155 Ser Glu Glu Glu Ile Pro Phe Lys Asp Asp Pro Arg Asp Glu Thr Tyr 165 170 Lys Pro His Leu Glu Arg Glu Thr Pro Lys Pro Arg Arg Lys Ser Gly 185 Lys Val Lys Glu Glu Lys Glu Lys Glu Ile Lys Val Glu Val Glu 200 Val Glu Val Lys Glu Glu Glu Asn Glu Ile Arg Glu Asp Glu Glu Pro 215 Pro Arg Lys Arg Gly Arg Arg Lys Asp Asp Lys Ser Pro Arg Leu. 235 Pro Lys Arg Arg Lys Lys Pro Pro Ile Gln Tyr Val Arg Cys Glu Met 245 250 Glu Gly Cys Gly Thr Val Leu Ala His Pro Arg Tyr Leu Gln His His 260 265 Ile Lys Tyr Gln His Leu Leu Lys Lys Lys Tyr Val Cys Pro His Pro 275 280 Ser Cys Gly Arg Leu Phe Arg Leu Gln Lys Gln Leu Leu Arg His Ala 295 Lys His His Thr Asp Gln Arg Asp Tyr Ile Cys Glu Tyr Cys Ala Arg 310 315 Ala Phe Lys Ser Ser His Asn Leu Ala Val His Arg Met Ile His Thr 325 330 Gly Glu Lys Pro Leu Gln Cys Glu Ile Cys Gly Phe Thr Cys Arg Gln 345 Lys Ala Ser Leu Asn Trp His Met Lys Lys His Asp Ala Asp Ser Phe 360 Tyr Gln Phe Ser Cys Asn Ile Cys Gly Lys Lys Phe Glu Lys Lys Asp 375 380 Ser Val Val Ala His Lys Ala Lys Ser His Pro Glu Val Leu Ile Ala 390 395 Glu Ala Leu Ala Ala Asn Ala Gly Ala Leu Ile Thr Ser Thr Asp Ile 405 410 Leu Gly Thr Asn Pro Glu Ser 420

<210> 1424 <211> 158 <212>Amino acid <213> Homo sapiens

<400> 1424 Met Thr Ala Asn Arg Leu Ala Glu Ser Leu Leu Ala Leu Ser Gln Gln 10 Glu Glu Leu Ala Asp Leu Pro Lys Asp Tyr Leu Leu Ser Glu Ser Glu 25 Asp Glu Gly Asp Asn Asp Gly Glu Arg Lys His Gln Lys Leu Leu Glu 40 Ala Ile Ser Ser Leu Asp Gly Lys Asn Arg Arg Lys Leu Ala Glu Arg 55 . 60 Ser Glu Ala Ser Leu Lys Val Ser Glu Phe Asn Val Ser Ser Glu Gly 75 Ser Gly Glu Lys Leu Val Leu Ala Asp Leu Leu Glu Pro Val Lys Thr 90 Ser Ser Ser Leu Ala Thr Val Lys Lys Gln Leu Ser Arg Val Lys Ser 100 105 Lys Lys Thr Val Glu Leu Pro Leu Asn Lys Glu Glu Ile Glu Arg Ile 115 120 125 His Arg Glu Val Ala Phe Asn Lys Thr Ala Gln Val Leu Ser Lys Trp 135 140 Asp Pro Val Val Leu Lys Asn Arg Gln Ala Glu Gln Leu * 150

<210> 1425
<211> 286
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (286)
<223> X = any amino acid or stop code

<400> 1425 Arg Ile Asp Phe Met Phe His Ser Ser Ala Met Val Asn Ser His Arg 10 5 Lys Pro Met Phe Asn Ile His Arg Gly Phe Tyr Cys Leu Thr Ala Ile 20 25 Leu Pro Gln Ile Cys Ile Cys Ser Gln Phe Ser Val Pro Ser Ser Tyr 40 His Phe Thr Glu Asp Pro Gly Ala Phe Pro Val Ala Thr Asn Gly Glu 55 Arg Phe Pro Trp Gln Glu Leu Arg Leu Pro Ser Val Val Ile Pro Leu 75 His Tyr Asp Leu Phe Val His Pro Asn Leu Thr Ser Leu Asp Phe Val 90 Ala Ser Glu Lys Ile Glu Val Leu Val Ser Asn Ala Thr Gln Leu Ile 100 105 Ile Leu His Ser Lys Asp Leu Glu Ile Thr Asn Ala Thr Leu Gln Ser 120 125 Glu Glu Asp Ser Arg Tyr Met Lys Pro Gly Lys Glu Leu Lys Val Leu 135 140 Ser Tyr Pro Ala His Glu Gln Ile Ala Leu Leu Val Pro Glu Lys Leu 150 155 Thr Pro His Leu Lys Tyr Tyr Val Ala Met Asp Phe Gln Ala Lys Leu 170 Gly Asp Gly Phe Glu Gly Phe Tyr Lys Ser Thr Tyr Arg Thr Leu Gly

180 185 Gly Glu Thr Arg Ile Leu Ala Val Thr Asp Phe Glu Pro Thr Gln Ala 200 205 Arg Met Ala Phe Pro Cys Phe Asp Glu Pro Leu Phe Lys Ala Asn Phe 215 220 Ser Ile Lys Ile Arg Arg Glu Ser Arg His Ile Ala Leu Ser Asn Met 230 235 Pro Lys Val Lys Thr Ile Glu Leu Glu Gly Gly Leu Leu Glu Asp His 245 . 250 Phe Glu Thr Thr Val Lys Met Ser Thr Tyr Leu Val Ala Tyr Ile Asp 260 265 Leu Xaa Phe Pro Leu Met Gly Asn Asp Phe Leu Gly Arg Ser 280

<210> 1426 <211> 224 <212>Amino acid <213> Homo sapiens

<400> 1426 Arg Ser Lys Ile Pro Arg Ser Asp Pro Arg Val Arg Thr Pro Ala Pro 5 ` 10 Ala Glu Ala Glu Gln Gly Lys Ser Gln Cys Pro Ser Gly Ser Thr Ala Gln Ser Trp Ser Ala Met Asp Ile Leu Val Pro Leu Leu Gln Leu Leu 35 40 Val Leu Leu Leu Thr Leu Pro Leu His Leu Met Ala Leu Leu Gly Cys 55 Trp Gln Pro Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu 75 80 70 Thr Pro Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe 90 Ser Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu 105 Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro Gly 115 120 125 Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu Arg Phe Val 150 155 Val Ala Pro Gly Glu Asp Met Arg Gln Leu Ala Asp Gly Ser Met Asp Val Val Cys Thr Leu Val Leu Cys Ser Val Gln Ser Pro Arg Lys 180 . 185 Val Leu Gln Glu Val Arg Arg Val Leu Arg Pro Gly Gly Val Leu Phe 200 Phe Trp Glu His Val Ala Glu Pro Tyr Gly Ser Trp Ala Phe Met Trp 220

<210> 1427 <211> 133 <212>Amino acid <213> Homo sapiens

<400> 1427 Arg Leu Gln Asn Ser Ser Leu Met Asp Pro Lys Leu Gly Arg Met Ala 1 5 10 Ala Ser Leu Leu Ala Val Leu Leu Leu Leu Leu Glu Arg Gly Met 25 Phe Ser Ser Pro Ser Pro Pro Pro Ala Leu Leu Glu Lys Val Phe Gln 40 Tyr Ile Asp Leu His Gln Asp Glu Phe Val Gln Thr Leu Lys Glu Trp 55 Val Ala Ile Glu Ser Asp Ser Val Gln Pro Val Pro Arg Phe Arg Gln 70 75 Glu Leu Phe Arg Met Met Ala Val Ala Ala Asp Thr Leu Gln Arg Leu 8.5 Gly Ala Arg Val Ala Ser Val Asp Met Gly Pro Gln Gln Leu Pro Asp 100 105 Gly Gln Ser Leu Pro Ile Pro Pro Val Ile Leu Ala Glu Leu Gly Ser 115 120 Asp Pro Thr Lys Gly 130

<210> 1428 <211> 38 <212>Amino acid <213> Homo sapiens

<210> 1429 <211> 145 <212>Amino acid <213> Homo sapiens

<210> 1430 <211> 453 <212>Amino acid <213> Homo sapiens

<400> 1430 Phe Val Lys Leu Ile Lys Lys His Gln Ala Ala Met Glu Lys Glu Ala 10 Lys Val Met Ser Asn Glu Glu Lys Lys Phe Gln Gln His Ile Gln Ala 25 Gln Gln Lys Lys Glu Leu Asn Ser Phe Leu Glu Ser Gln Lys Arq Glu 40 Tyr Lys Leu Arg Lys Glu Gln Leu Lys Glu Glu Leu Asn Glu Asn Gln 55 Ser Thr Pro Lys Lys Glu Lys Gln Glu Trp Leu Ser Lys Gln Lys Glu 75 Asn Ile Gln His Phe Gln Ala Glu Glu Glu Ala Asn Leu Leu Arg Arg 90 Gln Arg Gln Tyr Leu Glu Leu Glu Cys Arg Arg Phe Lys Arg Arg Met 100 105 110 Leu Leu Gly Arg His Asn Leu Glu Gln Asp Leu Val Arg Glu Glu Leu 120 115 Asn Lys Arg Gln Thr Gln Lys Asp Leu Glu His Ala Met Leu Leu Arg 135 140 Gln His Glu Ser Met Gln Glu Leu Glu Phe Arg His Leu Asn Thr Ile 150 155 160 Gln Lys Met Arg Cys Glu Leu Ile Arg Leu Gln His Gln Thr Glu Leu 170 165 Thr Asn Gln Leu Glu Tyr Asn Lys Arg Arg Glu Arg Glu Leu Arg Arg 185 Lys His Val Met Glu Val Arg Gln Gln Pro Lys Ser Leu Lys Ser Lys 200 Glu Leu Gln Ile Lys Lys Gln Phe Gln Asp Thr Cys Lys Ile Gln Thr 215 220 Arg Gln Tyr Lys Ala Leu Arg Asn His Leu Leu Glu Thr Thr Pro Lys 230 Ser Glu His Lys Ala Val Leu Lys Arg Leu Lys Glu Glu Gln Thr Arg 245 250 Lys Leu Ala Ile Leu Ala Glu Gln Tyr Asp His Ser Ile Asn Glu Met 265 Leu Ser Thr Gln Ala Leu Arg Leu Asp Glu Ala Gln Glu Ala Glu Cys 280 Gln Val Leu Lys Met Gln Leu Gln Gln Glu Leu Glu Leu Leu Asn Ala 295 300 Tyr Gln Ser Lys Ile Lys Met Gln Ala Glu Ala Gln His Asp Arg Glu 310 315 Leu Arg Glu Leu Glu Gln Arg Val Ser Leu Arg Arg Ala Leu Leu Glu 330 Gln Lys Ile Glu Glu Met Leu Ala Leu Gln Asn Glu Arg Thr Glu 345 350 Arg Ile Arg Ser Leu Leu Glu Arg Gln Ala Arg Glu Ile Glu Ala Phe

<210> 1431 <211> 151 <212>Amino acid <213> Homo sapiens

<400> 1431 Leu Ala His Gly Ser Phe Gly Val Ser Asp Phe Pro Ala Pro Ala Ala Ala Pro Ala His Thr Leu Thr Ser Phe Ser Gly Ser Leu Ser Pro Gln 20 25 Phe Arg Lys Pro Leu Gly Arg Ala Pro Ala Met Pro Leu Val Arġ Tyr 40 Arg Lys Val Val Ile Leu Gly Tyr Arg Cys Val Gly Lys Thr Ser Leu 55 Ala His Gln Phe Val Glu Gly Glu Phe Ser Glu Gly Tyr Asp Pro Thr 70 75 Val Glu Asn Thr Tyr Ser Lys Ile Val Thr Leu Gly Lys Asp Glu Phe 90 His Leu His Leu Val Asp Thr Ala Gly Gln Asp Glu Tyr Ser Ile Leu 100 105 Pro Tyr Ser Phe Ile Ile Gly Val His Gly Tyr Val Leu Val Tyr Ser 120 Val Thr Ser Leu His Ser Phe Gln Val Ile Glu Ser Leu Tyr Gln Lys 135 Leu His Glu Gly His Gly Lys 150 151

<210> 1432 <211> 514 <212>Amino acid <213> Homo sapiens

55 Ser Gly Ser Val Cys Pro Gly Leu Gly Ala Gly Phe Gly Val Arg Ser 70 Phe His His Pro Val Ala Arg Ser Ala Val Leu Leu Pro Leu Ala 85 90 Pro Ala Ala Ala Gln Asp Ser Thr Gln Ala Ser Thr Pro Gly Ser Pro 100 105 Leu Ser Pro Thr Glu Tyr Glu Arg Phe Phe Ala Leu Leu Thr Pro Thr 120 Trp Lys Ala Glu Thr Thr Cys Arg Leu Arg Ala Thr His Gly Cys Arg 135 140 Asn Pro Thr Leu Val Gln Leu Asp Gln Tyr Glu Asn His Gly Leu Val 150 155 Pro Asp Gly Ala Val Cys Ser Asn Leu Pro Tyr Ala Ser Trp Phe Glu 170 165 Ser Phe Cys Gln Phe Thr His Tyr Arg Cys Ser Asn His Val Tyr Tyr 185 Ala Lys Arg Val Leu Cys Ser Gln Pro Val Ser Ile Leu Ser Pro Asn 200 Thr Leu Lys Glu Ile Glu Ala Ser Ala Glu Val Ser Pro Thr Thr Met 215 220 Thr Ser Pro Ile Ser Pro His Phe Thr Val Thr Glu Arg Gln Thr Phe 230 235 Gln Pro Trp Pro Glu Arg Leu Ser Asn Asn Val Glu Glu Leu Leu Gln 245 250 Ser Ser Leu Ser Leu Gly Gly Gln Glu Gln Ala Pro Glu His Lys Gln 260 265 Glu Gln Gly Val Glu His Arg Gln Glu Pro Thr Gln Glu His Lys Gln 280 Glu Glu Gly Gln Lys Gln Glu Glu Glu Glu Glu Glu Glu Glu Glu 295 Gly Lys Gln Glu Glu Gly Gln Gly Thr Lys Glu Gly Arg Glu Ala Val 310 315 Ser Gln Leu Gln Thr Asp Ser Glu Pro Lys Phe His Ser Glu Ser Leu 325 330 Ser Ser Asn Pro Ser Ser Phe Ala Pro Arg Val Arg Glu Val Glu Ser 345 Thr Pro Met Ile Met Glu Asn Ile Gln Glu Leu Ile Arg Ser Ala Gln 360 Glu Ile Asp Glu Met Asn Glu Ile Tyr Asp Glu Asn Ser Tyr Trp Arg 375 380 Asn Gln Asn Pro Gly Ser Leu Leu Gln Leu Pro His Thr Glu Ala Leu 390 395 Leu Val Leu Cys Tyr Ser Ile Val Glu Asn Thr Cys Ile Ile Thr Pro 405 410 Thr Ala Lys Ala Trp Lys Tyr Met Glu Glu Glu Ile Leu Gly Phe Gly 425 Lys Ser Val Cys Asp Ser Leu Gly Arg Arg His Met Ser Thr Cys Ala 440 Leu Cys Asp Phe Cys Ser Leu Lys Leu Glu Gln Cys His Ser Glu Ala 455 460 Ser Leu Gln Arg Gln Gln Cys Asp Thr Ser His Lys Thr Pro Phe Val 470 475 Ser Pro Leu Leu Ala Ser Gln Ser Leu Ser Ile Gly Asn Gln Val Gly 490 Ser Pro Glu Ser Gly Arg Phe Tyr Gly Leu Asp Leu Tyr Gly Gly Leu 505 His Met 514

<210> 1433 <211> 241 <212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(241)

<223> X = any amino acid or stop code

<400> 1433

Val Ser Trp Val Pro Ser Lys Asp Gly Asp Val Glu Gly Ala Arg Arg Pro Phe Thr Arg Leu Asn Thr Ser Leu Gly Pro Gly Leu Gln Glu Gly 2.0 25 Arg Arg Thr Trp Leu Val Pro Ile Pro Gly Ala Val Leu Pro Gly 40 Arg Thr Gln Glu Gln Pro Arg Ala Ser Pro Leu Tyr Kaa Pro Gly Ala 55 Pro Pro Cys Gln Pro Gln Gly Leu Val Ala Gly Pro Trp Ala Gln Xaa 70 Ala Gly Leu Arg Ser Asp Gly Phe Gly Pro Trp Pro Trp Arg Leu Val 90 Gly Thr Ala Gly Pro Arg Glu Lys Lys Val Gln Lys Ser Lys Cys Trp 105 His Phe Arg Cys Gly Arg His Pro Ala Arg Arg Ser Gly Trp Ala Gly 120 125 Arg His Ala Ser Leu Leu Ala Thr Gly Arg Pro Cys Ser Ser Ala Pro 135 140 Ser Gln Gln Pro Leu Gly Thr Ala Gly Asp Ser Arg Gln Glu Leu Leu 150 155 Arg Pro Pro Leu Val Xaa Val Asn Gly Ala Gln Ser Ser Ala Ala Gly 165 170 Asp Trp Gly Ser Ser Pro Arg Thr Ala Gln Ala Leu Ala Arg Pro His 185 Arg Leu Gly His His Pro Ala Ala Val Ala Pro Ala Ala Arg Leu Arg 200 Thr Gln Ser Gly His Ser Pro Arg Gly Pro Leu Cys Arg Ser Pro Gly 215 220 Ser Pro Arg Arg Met Gly Thr Trp Arg Gly Pro Ala Gly His Ser His 225 230 Asp 241

<210> 1434 <211> 127 <212>Amino acid <213> Homo sapiens

<400> 1434

70,30

<210> 1435 <211> 182 <212>Amino acid <213> Homo sapiens

<400> 1435 Gly Glu Cys Phe Ile Met Ala Ala Val Val Gln Gln Asn Asp Leu Val Phe Glu Phe Ala Ser Asn Val Met Glu Asp Glu Arg Gln Leu Gly Asp 20 25 Pro Ala Ile Phe Pro Ala Val Ile Val Glu His Val Pro Gly Ala Asp 40 Ile Leu Asn Ser Tyr Ala Gly Leu Ala Cys Val Glu Glu Pro Asn Asp 55 Met Ile Thr Glu Ser Ser Leu Asp Val Ala Glu Glu Glu Ile Ile Asp 70 Asp Asp Asp Asp Ile Thr Leu Thr Val Glu Ala Ser Cys His Asp 85 90 Gly Asp Glu Thr Ile Glu Thr Ile Glu Ala Ala Glu Ala Leu Leu Asn 100 105 Met Asp Ser Pro Gly Pro Met Leu Asp Glu Lys Arg Ile Asn Asn Asn 120 125 Ile Phe Ser Ser Pro Glu Asp Asp Met Val Val Ala Pro Val Thr His 135 Val Ser Val Thr Leu Asp Gly Ile Pro Glu Val Met Glu Thr Gln Gln 150 155 Val Gln Glu Lys Tyr Ala Asp Ser Pro Gly Ala Ser Ser Pro Glu Gln 165 170 Pro Lys Arg Lys Lys Lys 180 182

<210> 1436 <211> 154 <212>Amino acid <213> Homo sapiens

<210> 1437 <211> 63 <212>Amino acid <213> Homo sapiens

<210> 1438 <211> 140 <212>Amino acid <213> Homo sapiens

<400> 1438 Ala Glu Gly Glu Asp Val Pro Pro Leu Pro Thr Ser Ser Gly Asp Gly Trp Glu Lys Asp Leu Glu Glu Ala Leu Glu Ala Gly Gly Cys Asp Leu 20 25 Glu Thr Leu Arg Asn Ile Ile Gln Gly Arg Pro Leu Pro Ala Asp Leu 40 Arg Ala Lys Val Trp Lys Ile Ala Leu Asn Val Ala Gly Lys Gly Asp 55 Ser Leu Ala Ser Trp Asp Gly Ile Leu Asp Leu Pro Glu Gln Asn Thr 70 75 Ile His Lys Asp Cys Leu Gln Phe Ile Asp Gln Leu Ser Val Pro Glu 85 90 Glu Lys Ala Ala Glu Leu Leu Leu Asp Ile Glu Ser Val Ile Thr Phe 105 Tyr Cys Lys Ser Arg Asn Ile Lys Tyr Ser Thr Ser Leu Ser Trp Ile 115 120 His Leu Leu Lys Pro Leu Val His Leu Gln Leu Pro 135

<210> 1439 <211> 84 <212>Amino acid <213> Homo sapiens

<210> 1440 <211> 255 <212>Amino acid <213> Homo sapiens

<400> 1440 Ala Met Ala Gln Tyr Gly His Pro Ser Pro Leu Gly Met Ala Ala Arg Glu Glu Leu Tyr Ser Lys Val Thr Pro Arg Arg Asn Arg Gln Gln Arg Pro Gly Thr Ile Lys His Gly Ser Ala Leu Asp Val Leu Leu Ser Met 40 Gly Phe Pro Arg Ala Arg Ala Gln Lys Ala Leu Ala Ser Thr Gly Gly 55 Arg Ser Val Gln Ala Ala Cys Asp Trp Leu Phe Ser His Val Gly Asp 70 75 Pro Phe Leu Asp Asp Pro Leu Pro Arg Glu Tyr Val Leu Tyr Leu Arg 90 Pro Thr Gly Pro Leu Ala Gln Lys Leu Ser Asp Phe Trp Gln Gln Ser 105 Lys Gln Ile Cys Gly Lys Asn Lys Ala His Asn Ile Phe Pro His Ile 120 Thr Leu Cys Gln Phe Phe Met Cys Glu Asp Ser Lys Val Asp Ala Leu 135 140 Gly Glu Ala Leu Gln Thr Thr Val Ser Arg Trp Lys Cys Lys Phe Ser 150 155 Ala Pro Leu Pro Leu Glu Leu Tyr Thr Ser Ser Asn Phe Ile Gly Leu 170 Phe Val Lys Glu Asp Ser Ala Glu Val Leu Lys Lys Phe Ala Ala Asp 185 Phe Ala Ala Glu Ala Ala Ser Lys Thr Glu Val His Val Glu Pro His 200 Lys Lys Gln Leu His Val Thr Leu Ala Tyr His Phe Gln Ala Ser His 215 220 Leu Pro Thr Leu Glu Lys Leu Ala Gln Asn Ile Asp Val Lys Leu Gly 230 235

Cys Asp Trp Val Ala Thr Ile Phe Ser Arg Asp Ile Arg Phe Ala 245 250 255

<210> 1441 <211> 134 <212>Amino acid <213> Homo sapiens

<400> 1441 Gln Thr Arg Pro Ala Ser Pro Arg Thr Ala Arg Glu Ser Val Leu Gly 5 10 Val Ser Gln Asn Met Ser Phe Asn Leu Gln Ser Ser Lys Leu Phe 20 25 Ile Phe Leu Gly Lys Ser Leu Phe Ser Leu Leu Glu Ala Met Ile Phe 40 Ala Leu Leu Pro Lys Pro Arg Lys Asn Val Ala Gly Glu Ile Val Leu 55 Ile Thr Gly Ala Gly Ser Gly Leu Gly Arg Leu Leu Ala Leu Gln Phe 70 75 Ala Arg Leu Gly Ser Val Leu Val Leu Trp Asp Ile Asn Lys Glu Gly 85 90 Asn Glu Glu Thr Cys Lys Met Ala Arg Glu Ala Gly Ala Thr Arg Val 100 105 His Ala Tyr Thr Cys Asp Cys Ser Gln Lys Glu Gly Val Tyr Arg Val 115 120 Ala Asp Gln Val Lys Lys 130

<210> 1442 <211> 155 <212>Amino acid <213> Homo sapiens

<400> 1442 Met Val Ala Arg Lys Gly Gln Lys Ser Pro Arg Phe Arg Arg Val Thr 10 Cys Phe Leu Arg Leu Gly Arg Ser Thr Leu Leu Glu Leu Glu Pro Ala 25 Gly Arg Pro Cys Ser Gly Arg Thr Arg His Arg Ala Leu His Arg Arg 40 Leu Val Ala Cys Val Thr Val Ser Ser Arg Arg His Arg Lys Glu Ala Gly Arg Gly Arg Ala Glu Ser Phe Ile Ala Val Gly Met Ala Ala Pro 75 Ser Met Lys Glu Arg Gln Val Cys Trp Gly Ala Arg Asp Glu Tyr Trp 85 90 Lys Cys Leu Asp Glu Asn Leu Glu Asp Ala Ser Gln Cys Lys Leu 100 105 Arg Ser Ser Phe Glu Ser Ser Cys Pro Gln Gln Trp Ile Lys Tyr Phe 120 125 Asp Lys Arg Arg Asp Tyr Leu Lys Phe Lys Glu Lys Phe Glu Ala Gly 135 Gln Phe Glu Pro Ser Glu Thr Thr Ala Lys Ser 150

<210> 1443 <211> 157 <212>Amino acid <213> Homo sapiens

<400> 1443 Pro Ala Pro Ala Arg Ser Arg Glu Leu Leu Lys Glu Leu Arg Asn Gly Gln Asp Met Asp Thr Val Val Phe Glu Asp Val Val Asp Phe Thr Leu Glu Glu Trp Ala Leu Leu Asn Pro Ala Gln Arg Lys Leu Tyr 40 Arg Asp Val Met Leu Glu Thr Phe Lys His Leu Ala Ser Val Asp Asn Glu Ala Gln Leu Lys Ala Ser Gly Ser Ile Ser Gln Gln Asp Thr Ser Gly Glu Lys Leu Ser Leu Lys Gln Lys Ile Glu Lys Phe Thr Arg Lys 85 Asn Ile Trp Ala Ser Leu Leu Gly Lys Asn Trp Glu Glu His Ser Val 105 Lys Asp Lys His Asn Thr Lys Glu Arg His Leu Ser Arg Asn Pro Arg 120 125 Val Glu Arg Pro Cys Lys Ser Ser Lys Gly Asn Lys Arg Gly Arg Thr 135 Phe Arg Lys Thr Arg Asn Cys Asn Arg His Leu Arg Arg 155

<210> 1444 <211> 53 <212>Amino acid <213> Homo sapiens

<210> 1445 <211> 106 <212>Amino acid <213> Homo sapiens

<400> 1445

Gly Thr Arg Leu Arg Arg Arg Glu Ala Val Trp Phe Glu Val Val 10 Asn Met Asp Phe Ser Arg Leu His Met Tyr Ser Pro Pro Gln Cys Val 20 25 Pro Glu Asn Thr Gly Tyr Thr Tyr Ala Leu Ser Ser Ser Tyr Ser Ser 40 45 Asp Ala Leu Asp Phe Glu Thr Glu His Lys Leu Asp Pro Val Phe Asp 55 Ser Pro Arg Met Ser Arg Arg Ser Leu Arg Leu Ala Thr Thr Ala Cys 70 75 Thr Leu Gly Asp Gly Glu Ala Val Gly Ala Asp Ser Gly Thr Ser Ser 85 Ala Val Ser Leu Lys Asn Arg Ala Ala Arg

<210> 1446 <211> 95 <212>Amino acid <213> Homo sapiens

 Asp
 Thr
 Met
 Gln
 Ala
 Val
 Val
 Pro
 Leu
 Asn
 Lys
 Met
 Thr
 Ala
 Ile
 Ser

 Pro
 Glu
 Pro
 Gln
 Thr
 Leu
 Ala
 Ser
 Thr
 Glu
 Gln
 Asn
 Glu
 Val
 Pro
 Arg

 Val
 Thr
 Ser
 Gly
 Glu
 Glu
 Glu
 Ala
 Ile
 Leu
 Arg
 Gly
 Asn
 Ala
 Ala
 Ala

 Asp
 Ala
 Glu
 Ser
 Glu
 Arg
 Phe
 Arg
 Phe
 Arg
 Trp
 Phe
 Cys
 Tyr
 Ser
 Glu

 Val
 Ala
 Gly
 Pro
 Arg
 Leu
 Ser
 Gln
 Leu
 Trp
 Phe
 Cys
 Tyr
 Ser
 Glu
 Ser
 Gln
 Leu
 Trp
 Glu
 Leu
 Cys
 Asn
 Asn
 65
 Free
 Free
 Arg
 Free
 Free
 Free
 Free
 Free
 Free
 Free
 Free
 Free
 Free

<210> 1447 <211> 127 <212>Amino acid <213> Homo sapiens

k. .

<400> 1447 Pro Ile Cys Leu Phe Ser Arg Pro Thr Leu Arg Pro Ser Arg Ser Lys 10 Val Ser Leu Ile Glu Gly Arg Gly Ala Asn Met Ala Ala Arg Trp Arg 20 Phe Trp Cys Val Ser Val Thr Met Val Val Ala Leu Leu Ile Val Cys 35 Asp Val Pro Ser Ala Ser Ala Gln Arg Lys Lys Glu Met Val Leu Ser 55 Glu Lys Val Ser Gln Leu Met Glu Trp Thr Asn Lys Arg Pro Val Ile 70 Arg Met Asn Gly Asp Lys Phe Arg Arg Leu Val Lys Ala Pro Pro Arg 90 Asn Tyr Ser Val Ile Val Met Phe Thr Ala Leu Gln Leu His Arg Gln 100 105

Cys Val Val Cys Lys Tyr Glu Leu Gln Leu Arg Phe Lys Ile Lys 115 120 125 127

<210> 1448 <211> 143 <212>Amino acid <213> Homo sapiens

<400> 1448 Gln Met Arg Val Lys Asp Pro Thr Lys Ala Leu Pro Glu Lys Ala Lys 10 Arg Ser Lys Arg Pro Thr Val Pro His Asp Glu Asp Ser Ser Asp Asp 25 Ile Ala Val Gly Leu Thr Cys Gln His Val Ser His Ala Ile Ser Val 40 Asn His Val Lys Arg Ala Ile Ala Glu Asn Leu Trp Ser Val Cys Ser 55 Glu Cys Leu Lys Glu Arg Arg Phe Tyr Asp Gly Gln Leu Val Leu Thr 70 Ser Asp Ile Trp Leu Cys Leu Lys Cys Gly Phe Gln Gly Cys Gly Lys 90 Asn Ser Glu Ser Gln His Ser Leu Lys His Phe Lys Ser Ser Arg Thr 100 105 Glu Pro His Cys Ile Ile Ile Asn Leu Ser Thr Trp Ile Ile Trp Trp 120 125 Tyr Glu Trp Asp Glu Lys Ile Phe Thr Pro Leu Asn Lys Lys Gly 135 140

<212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(121) <223> X = any amino acid or stop code

<210> 1449 <211> 121

<400> 1449 Ala Lys Glu Arg Gly Glu Glu Arg Gln Gly Glu Gly Gly Trp Leu 5 10 15 Ser Gly Ser Arg Trp Pro Leu Val Arg Ser Ala Phe Val Pro Ala Pro 20 25 Ser Ser Leu Ile Leu Ser Met Cys Leu Ser Pro Gly Ile Pro Glu Ala 40 Ala Pro Asp Ser Pro Leu Thr Ala Ser Ala Pro Thr Pro Xaa Val Met 60 Leu Leu Gly Asp Thr Gly Val Gly Lys Thr Cys Phe Leu Ile Gln Phe 75 Lys Asp Gly Ala Phe Leu Ser Gly Thr Phe Ile Ala Thr Val Gly Ile 90 Asp Phe Arg Val Arg Trp Leu Gln Ala Leu Ala Ser Ser Arg Glu Pro Gly Leu Trp Leu Arg His Gly Gly Val

115 120 121

<210> 1450 <211> 76 <212>Amino acid <213> Homo sapiens

<210> 1451 <211> 95 <212>Amino acid <213> Homo sapiens

<210> 1452 <211> 174 <212>Amino acid <213> Homo sapiens

40 Pro Ala Met Ser Ser Ser Arg Lys Asp His Leu Gly Ala Ser Ser Ser 55 Glu Pro Leu Pro Val Ile Ile Val Gly Asn Gly Pro Ser Gly Ile Cys Leu Ser Tyr Leu Leu Ser Gly Tyr Thr Pro Tyr Thr Lys Pro Asp Ala Ile His Pro His Pro Leu Leu Gln Arg Lys Leu Thr Glu Ala Pro Gly 100 105 Val Ser Ile Leu Asp Gln Asp Leu Asp Tyr Leu Ser Glu Gly Leu Glu 120 Gly Arg Ser Gln Ser Pro Val Ala Leu Leu Phe Asp Ala Leu Leu Arg 135 140 Pro Asp Thr Asp Phe Gly Gly Asn Met Lys Ser Val Leu Thr Trp Lys 150 155 His Arg Lys Glu His Ala Ile Pro His Val Val Leu Gly Arg 165 170 174

<210> 1453 <211> 518 <212>Amino acid <213> Homo sapiens

<400> 1453 Asn Arg Arg Thr Arg Ala Gln Arg Cys Gln Arg Gly Arg Ser Cys Gly Ala Arg Glu Glu Val Glu Pro Gly Thr Ala Arg Pro Pro Pro Ala 20 25 Ala Ser Ala Met Asp Ala Ser Leu Glu Lys Ile Ala Asp Pro Thr Leu 40 Ala Glu Met Gly Lys Asn Leu Lys Glu Ala Val Lys Met Leu Glu Asp 5.5 Ser Gln Arg Arg Thr Glu Glu Glu Asn Gly Lys Lys Leu Ile Ser Gly 75 Asp Ile Pro Gly Pro Leu Gln Gly Ser Gly Gln Asp Met Val Ser Ile 90 Leu Gln Leu Val Gln Asn Leu Met His Gly Asp Glu Asp Glu Glu Pro 105 Gln Ser Pro Arg Ile Gln Asn Ile Gly Glu Gln Gly His Met Ala Leu 120 Leu Gly His Ser Leu Gly Ala Tyr Ile Ser Thr Leu Asp Lys Glu Lys 135 Leu Arg Lys Leu Thr Thr Arg Ile Leu Ser Asp Thr Thr Leu Trp Leu 150 155 Cys Arg Ile Phe Arg Tyr Glu Asn Gly Cys Ala Tyr Phe His Glu Glu 165 170 Glu Arg Glu Gly Leu Ala Lys Ile Cys Arg Leu Ala Ile His Ser Arg 185 Tyr Glu Asp Phe Val Val Asp Gly Phe Asn Val Leu Tyr Asn Lys Lys 200 Pro Val Ile Tyr Leu Ser Ala Ala Ala Arg Pro Gly Leu Gly Gln Tyr 215 Leu Cys Asn Gln Leu Gly Leu Pro Phe Pro Cys Leu Cys Arg Val Pro 230 235 Cys Asn Thr Val Phe Gly Ser Gln His Gln Met Asp Val Ala Phe Leu 250 Glu Lys Leu Ile Lys Asp Asp Ile Glu Arg Gly Arg Leu Pro Leu Leu 265 Leu Val Ala Asn Ala Gly Thr Ala Ala Val Gly His Thr Asp Lys Ile

275 280 Gly Arg Leu Lys Glu Leu Cys Glu Gln Tyr Gly Ile Trp Leu His Val 295 Glu Gly Val Asn Leu Ala Thr Leu Ala Leu Gly Tyr Val Ser Ser 310 315 Val Leu Ala Ala Lys Cys Asp Ser Met Thr Met Thr Pro Gly Pro 330 Trp Leu Gly Leu Pro Ala Val Pro Ala Val Thr Leu Tyr Lys His Asp 345 Asp Pro Ala Leu Thr Leu Val Ala Gly Leu Thr Ser Asn Lys Pro Thr 360 Asp Lys Leu Arg Ala Leu Pro Leu Trp Leu Ser Leu Gln Tyr Leu Gly 375 Leu Asp Gly Phe Val Glu Arg Ile Lys His Ala Cys Gln Leu Ser Gln 395 Arg Leu Gln Glu Ser Leu Lys Lys Val Asn Tyr Ile Lys Ile Leu Val 410 Glu Asp Glu Leu Ser Ser Pro Val Val Val Phe Arg Phe Phe Gln Glu 420 425 430 Leu Pro Gly Ser Asp Pro Val Phe Lys Ala Val Pro Val Pro Asn Met 435 440 445 Thr Pro Ser Gly Val Gly Arg Glu Arg His Ser Cys Asp Ala Leu Asn 455 460 Arg Trp Leu Gly Glu Gln Leu Lys Gln Leu Val Pro Ala Ser Gly Leu 470 475 Thr Val Met Asp Leu Glu Ala Glu Gly Thr Cys Leu Arg Phe Ser Pro 485 490 Leu Met Thr Ala Ala Gly Lys Pro Gly Leu Val Asp Ile Pro Cys Phe 500 505 Cys Ser Gly Ala Ala Gly 515

<210> 1454 <211> 185 <212>Amino acid <213> Homo sapiens

<400> 1454 Leu Cys Ile Met Asp Thr Lys Glu Glu Lys Lys Glu Arg Lys Gln Ser Tyr Phe Ala Arg Leu Lys Lys Lys Gln Ala Lys Gln Asn Ala Glu 25 Thr Ala Ser Ala Val Ala Thr Arg Thr His Thr Gly Lys Glu Asp Asn 35 Asn Thr Val Val Leu Glu Pro Asp Lys Cys Asn Ile Ala Val Glu Glu Glu Tyr Met Thr Asp Glu Lys Lys Lys Arg Lys Ser Asn Gln Leu Lys 75 Glu Ile Arg Arg Thr Glu Leu Lys Arg Tyr Tyr Ser Ile Asp Asp Asn 85 90 Gln Asn Lys Thr His Asp Lys Lys Glu Lys Lys Met Val Val Gln Lys 100 105 Pro His Gly Thr Met Glu Tyr Thr Ala Gly Asn Gln Asp Thr Leu Asn 115 120 125 Ser Ile Ala Leu Lys Phe Asn Ile Thr Pro Asn Lys Leu Val Glu Leu 140 Asn Lys Leu Phe Thr His Thr Ile Val Pro Gly Gln Val Leu Phe Val 150 155 Pro Asp Ala Asn Ser Pro Ser Ser Thr Leu Arg Leu Ser Ser Ser

165 170 175
Pro Gly Ala Thr Val Ser Pro Ser Ser
180 185

<210> 1455 <211> 206 <212>Amino acid <213> Homo sapiens

<400> 1455 Ser Ala Gly Gly Asp Ser Cys Arg Ala Val Pro Met Leu Arg Phe Pro 10 Thr Cys Phe Pro Ser Phe Arg Val Val Gly Glu Lys Gln Leu Pro Gln 20 25 Glu Ile Ile Phe Leu Val Trp Ser Pro Lys Arg Asp Leu Ile Ala Leu 40 45 Ala Asn Thr Ala Gly Glu Val Leu Leu His Arg Leu Ala Ser Phe His 55 Arg Val Trp Ser Phe Pro Pro Asn Glu Asn Thr Gly Lys Glu Val Thr 75 Cys Leu Ala Trp Arg Pro Asp Gly Lys Leu Leu Ala Phe Ala Leu Ala Asp Thr Lys Lys Ile Val Leu Cys Asp Val Glu Lys Pro Glu Ser Leu 100 105 110 His Ser Phe Ser Val Glu Ala Pro Val Ser Cys Met His Trp Met Glu 120 Val Thr Val Glu Ser Ser Val Leu Thr Ser Phe Tyr Asn Ala Glu Asp 135 Glu Ser Asn Leu Leu Pro Lys Leu Pro Thr Leu Pro Lys Asn Tyr 150 155 Ser Asn Thr Ser Lys Ile Phe Ser Glu Glu Asn Ser Asp Glu Ile Ile 165 170 Lys Leu Leu Gly Asp Val Arg Leu Asn Ile Leu Val Leu Gly Gly Ser 185 190 Ser Gly Phe Ile Glu Leu Tyr Ala Tyr Gly Met Phe Lys Ile 200

<210> 1456 <211> 100 <212>Amino acid <213> Homo sapiens

 400> 1456

 Pro Arg Asp Pro Val Thr Asp Arg Ala Arg Ala Met Pro Arg Arg Gly 1

 Leu Val Ala Gly Pro Asp Leu Glu Tyr Phe Gln Arg His Tyr Phe Thr 20

 Pro Ala Glu Val Ala Gln His Asn Arg Pro Glu Asp Leu Trp Val Ser 35

 Tyr Leu Gly Arg Val Tyr Asp Leu Thr Ser Leu Ala Gln Glu Tyr Lys 50

 Gly Asn Leu Leu Leu Leu Lys Pro Ile Val Glu Val Ala Gly Gln Asp Ile 65

 Ser His Trp Phe Asp Pro Lys Thr Arg Asp Val Ser Tyr Ala Gly Thr

85 90 95

Trp Asp Cys Gly

<210> 1457 <211> 159 <212>Amino acid <213> Homo sapiens

<400> 1457 Arg Ile Pro Gly Arg Arg Phe Arg Ala Ala Phe Val Leu Gly Ser Ala 10 Asn Val Ala Ser Ser Val Arg Leu Arg Cys Ser Phe Pro Leu Ser Leu 25 Gly Gly Pro Ser Gly Pro Ala Ala Ser Val Ala Leu Gly Pro Ala 40 Gly Pro Gly Arg Ser Leu Gly Arg Thr Pro Asp Thr Gly Asp Trp Glu 60 Met Asp Ser Val Ser Phe Glu Asp Val Ala Val Ala Phe Thr Gln Glu 70 75 Glu Trp Ala Leu Leu Asp Pro Ser Gln Lys Asn Leu Tyr Arg Asp Val 85 Met Gln Glu Ile Phe Arg Asn Leu Ala Ser Val Gly Asn Lys Ser Glu 105 Asp Gln Asn Ile Gln Asp Asp Phe Lys Asn Pro Gly Arg Asn Leu Ser 120 Ser His Val Val Glu Arg Leu Phe Glu Ile Lys Glu Gly Ser Gln Tyr 135 140 Gly Glu Thr Phe Ser Gln Asp Ser Asn Leu Asn Leu Asn Lys Ile 155

<210> 1458 <211> 154 <212>Amino acid <213> Homo sapiens

<400> 1458 Ser Leu Ser Leu Ser Val Ser Pro Phe Leu Arg Leu Ser Leu Gly Arg 10 Val Gly Gly Met Ala Glu Glu Met Glu Ser Ser Leu Glu Ala Ser Phe 25 Ser Ser Ser Gly Ala Val Ser Gly Ala Ser Gly Phe Leu Pro Pro Ala 40 Arg Ser Arg Ile Phe Lys Ile Ile Val Ile Gly Asp Ser Asn Val Gly 55 Lys Thr Cys Leu Thr Tyr Arg Phe Cys Ala Gly Arg Phe Pro Asp Arg 75 Thr Glu Ala Thr Ile Gly Val Asp Phe Arg Glu Arg Ala Val Glu Ile Asp Gly Glu Arg Ile Lys Ile Gln Leu Trp Asp Thr Ala Gly Gln Glu 100 110 Arg Phe Arg Lys Ser Met Val Gln His Tyr Tyr Arg Asn Val His Ala 120 Val Val Phe Val Tyr Asp Met Thr Asn Met Ala Ser Phe His Ser Leu

130 135 140
Pro Ser Trp Ile Glu Glu Cys Lys Gln His
145 150 154

<210> 1459 <211> 136 <212>Amino acid <213> Homo sapiens

<400> 1459 Arg Arg Pro Ser Pro Gly Ser Ile Val Ile Met Ala Ala Glu Ser Asp 10 Val Leu His Phe Gln Phe Glu Gln Gln Gly Asp Val Val Leu Gln Lys Met Asn Leu Leu Arg Gln Gln Asn Leu Phe Cys Asp Val Ser Ile Tyr Ile Asn Asp Thr Glu Phe Gln Gly His Lys Val Ile Leu Ala Ala Cys Ser Thr Phe Met Arg Asp Gln Phe Leu Leu Thr Gln Ser Lys His Val 70 75 Arg Ile Thr Ile Leu Gln Ser Ala Glu Val Gly Arg Lys Leu Leu 85 90 Ser Cys Tyr Thr Gly Ala Leu Glu Val Lys Arg Lys Glu Leu Leu Lys 105 Tyr Leu Thr Ala Ala Ser Tyr Leu Gln Met Val His Ile Ala Glu Lys 120 Arg Thr Glu Ala Phe Val Lys Phe

<210> 1460 <211> 219 <212>Amino acid <213> Homo sapiens

<400> 1460 Ala Glu Gly Leu Gln Ser Ala Ala Gly Ile Arg Ile Asp Thr Lys Ala 5 10 Gly Pro Pro Glu Met Leu Lys Pro Leu Trp Lys Ala Ala Val Ala Pro 25 Thr Trp Pro Cys Ser Met Pro Pro Arg Arg Pro Trp Asp Arg Gln Ala 40 Gly Thr Leu Gln Val Leu Gly Ala Leu Ala Val Leu Trp Leu Gly Ser Val Ala Leu Ile Cys Leu Leu Trp Gln Val Pro Arg Pro Pro Thr Trp 75 Gly Gln Val Gln Pro Lys Asp Val Pro Arg Ser Trp Glu His Gly Ser Ser Pro Ala Trp Glu Pro Leu Glu Ala Glu Ala Arg Gln Gln Arg Asp 100 105 Ser Cys Gln Leu Val Leu Val Glu Ser Ile Pro Gln Asp Leu Pro Ser 125 Ala Ala Gly Ser Pro Ser Ala Gln Pro Leu Gly Gln Ala Trp Leu Gln 135 Leu Leu Asp Thr Ala Gln Glu Ser Val His Val Ala Ser Tyr Tyr Trp

<210> 1461 <211> 80 <212>Amino acid <213> Homo sapiens

<210> 1462 <211> 176 <212>Amino acid <213> Homo sapiens

<400> 1462 Leu Gln Pro Leu Ser Ser Trp Glu Ser Ala Ser Glu Val Thr Arg Ser 10 Pro Val Ser Pro Glu Asp Val Lys Gln Ala Thr Ser Asn Phe Glu Asn 25 Leu Gln Lys Gln Leu Ala Arg Lys Met Lys Leu Pro Ile Phe Ile Ala 40 Asp Ala Phe Thr Ala Arg Ala Phe Arg Gly Asn Pro Ala Ala Val Cys Leu Leu Glu Asn Glu Leu Asp Glu Asp Met His Gln Lys Ile Ala Arg 70 Glu Met Asn Leu Ser Glu Thr Ala Phe Ile Arg Lys Leu His Pro Thr 85 90 Asp Asn Phe Ala Gln Ser Ser Cys Phe Gly Leu Arg Trp Phe Thr Pro 105 Ala Ser Glu Val Pro Leu Cys Gly His Ala Thr Leu Ala Ser Ala Ala 120 125 Val Leu Phe His Lys Ile Lys Asn Met Asn Ser Thr Leu Thr Phe Val 135 140 Thr Leu Ser Gly Glu Leu Arg Ala Arg Arg Ala Glu Asp Gly Ile Val

145 150 155 160

Leu Asp Leu Pro Leu Tyr Pro Ala His Pro Gln Asp Phe His Glu *
165 170 175

<210> 1463 <211> 150 <212>Amino acid <213> Homo sapiens

<400> 1463 Ala Ala Asp Thr Met Gln Ser Asp Asp Val Ile Trp Asp Thr Leu Gly Asn Lys Gln Phe Cys Ser Phe Lys Ile Arg Thr Lys Thr Gln Ser Phe 20 Cys Arg Asn Glu Tyr Ser Leu Thr Gly Leu Cys Asn Arg Ser Ser Cys 40 Pro Leu Ala Asn Ser Gln Tyr Ala Thr Ile Lys Glu Glu Lys Gly Gln 55 Cys Tyr Leu Tyr Met Lys Val Ile Glu Arg Ala Ala Phe Pro Arg Arg Leu Trp Glu Arg Val Arg Leu Ser Lys Asn Tyr Glu Lys Ala Leu Glu 90 Gln Ile Asp Glu Asn Leu Ile Tyr Trp Pro Arg Phe Ile Arg His Lys 105 Cys Lys Gln Arg Phe Thr Lys Ile Thr Gln Tyr Leu Ile Arg Ile Arg 120 Lys Leu Thr Leu Lys Arg Gln Arg Lys Leu Val Pro Leu Ser Lys Lys 130 135 Val Glu Arg Arg Glu Lys

<210> 1464 <211> 86 <212>Amino acid <213> Homo sapiens

<210> 1465 <211> 286 <212>Amino acid

<213> Homo sapiens

<400> 1465 Val Val Glu Phe Leu Trp Ser Arg Pro Ser Gly Ser Ser Asp Pro Arg Pro Arg Arg Pro Ala Ser Lys Cys Gln Met Met Glu Glu Arg Ala 20 Asn Leu Met His Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser Ala Leu Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln Gln Phe Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val 75 Lys Lys Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu 90 Leu Val Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val 105 Arg Asn Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp 120 Leu Tyr Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val 135 Leu Ile Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala 150 155 Leu Met Met Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly 170 Leu Asn Val Leu Asp Ala Asn Leu Cys Leu Lys Gly Glu Asp Leu Asp 185 Ser Gln Val Gly Val Ile Asp Phe Ser Leu Tyr Leu Lys Asp Val Gln 200 Asp Leu Asp Gly Gly Lys Glu His Glu Arg Ile Thr Asp Val Leu Asp 215 Gln Lys Asn Tyr Val Glu Glu Leu Asn Arg His Leu Ser Cys Thr Val 230 235 · 240 Gly Asp Leu Gln Thr Lys Ile Asp Gly Leu Glu Lys Thr Asn Ser Lys 245 250 255 Leu Gln Glu Arg Val Ser Ala Ala Thr Asp Arg Ile Cys Ser Leu Gln 265 Glu Glu Gln Gln Leu Arg Glu Gln Asn Glu Leu Ile Arg 275 280

<210> 1466 <211> 127 <212>Amino acid <213> Homo sapiens

65 70 70 75 75 80

Arg His Ser Arg Ala Pro Leu Gly Leu Gln Gly Leu Arg Met Ala Ala 85 90 95

Ser Ala Gln Val Ser Val Thr Phe Glu Asp Val Ala Val Thr Phe Thr 100 100 105 105 110

Gln Glu Glu Trp Gly Gln Leu Asp Ala Ala Gln Arg Thr Leu Tyr 115 120 125 127

<210> 1467 <211> 146 <212>Amino acid <213> Homo sapiens

<400> 1467 Phe Arg Gly Ser Leu Ser Ser Pro Ser Ser Leu Arg Gly Arg Arg Leu 5 10 Val Thr Gly Gln Thr Ser Pro Arg Gly Thr Trp Cys Leu Tyr Pro Gly 25 Phe Cys Arg Ser Val Ala Cys Ala Met Pro Cys Cys Ser His Arg Ser Cys Arg Glu Asp Pro Gly Thr Ser Glu Ser Arg Glu Met Asp Pro Val 55 Val Phe Glu Asp Val Ala Val Asn Phe Thr Gln Glu Glu Trp Thr Leu Leu Asp Ile Ser Gln Lys Asn Leu Phe Arg Glu Val Met Leu Glu Thr 90 Phe Arg Asn Leu Thr Ser Ile Gly Lys Lys Trp Ser Asp Gln Asn Ile Glu Tyr Glu Tyr Gln Asn Pro Arg Arg Ser Phe Arg Ser Leu Ile Glu 115 120 125 Glu Lys Val Asn Glu Ile Lys Glu Asp Ser His Cys Gly Glu Thr Phe 130 135 Thr Gln 145 146

<210> 1468 <211> 44 <212>Amino acid <213> Homo sapiens

<210> 1469 <211> 198 <212>Amino acid <213> Homo sapiens

<400> 1469 Ser Gly Asp Leu Ser Pro Ala Glu Leu Met Met Leu Thr Ile Gly Asp 10 Val Ile Lys Gln Leu Ile Glu Ala His Glu Gln Gly Lys Asp Ile Asp 25 Leu Asn Lys Val Lys Thr Lys Thr Ala Ala Lys Tyr Gly Leu Ser Ala 40 Gln Pro Arg Leu Val Asp Ile Ile Ala Ala Val Pro Pro Gln Tyr Arg 55 Lys Val Leu Met Pro Lys Leu Lys Ala Lys Pro Ile Arg Thr Ala Ser 70 75 Gly Ile Ala Val Val Ala Val Met Cys Lys Pro His Arg Cys Pro His 85 90 Ile Ser Phe Thr Gly Asn Ile Cys Val Tyr Cys Pro Gly Gly Pro Asp 105 Ser Asp Phe Glu Tyr Ser Thr Gln Ser Tyr Thr Gly Tyr Glu Pro Thr 120 125 Ser Met Arg Ala Ile Arg Ala Arg Tyr Asp Pro Phe Leu Gln Thr Arg 135 140 His Arg Ile Glu Gln Leu Lys Gln Leu Gly His Ser Val Asp Lys Val 150 155 Glu Phe Ile Glu Met Gly Gly Thr Phe Met Ala Leu Pro Glu Glu Tyr 165 170 Arg Asp Tyr Phe Ile Arg Asn Leu His Asp Ala Leu Ser Gly His Thr 180 185 Ser Asn Asn Ile Tyr Glu 195 198

<210> 1470 <211> 178 <212>Amino acid <213> Homo sapiens

<400> 1470 Trp Glu Ser Asp Val Gly Glu Gly Leu Arg Pro Pro Pro Pro Pro Pro 5 10 Pro Pro Gly Arg Arg Thr Gln Glu Pro Arg Ala Arg Asp Ala Ala 20 Thr Val Ile Phe Ala Cys Pro Ala Ala Leu Leu Glu Thr Leu Ile Ala 40 Tyr Gly Ser Ser Ser Pro Ser Phe Cys Lys His Arg Ala Ala Arg Pro 50 . 55 Leu Ile Phe Leu Leu His Arg Leu Thr Ala Glu Ala Thr Ala Arg Cys 70 Pro Ile Cys Ala Leu Glu Ala Arg Asn Pro Gly Arg Trp Gly Ile Cys 85 90 Ala Ser Trp Pro Gly Met Lys Thr Pro Phe Gly Lys Ala Ala Ala Gly 105 Gln Arg Ser Arg Thr Gly Ala Gly His Gly Ser Val Ser Val Thr Met 115 120 Ile Lys Arg Lys Ala Ala His Lys Lys His Arg Ser Arg Pro Thr Ser 135 Gln Pro Arg Gly Asn Ile Val Gly Cys Ile Ile Gln His Gly Trp Lys 155 Asp Gly Asp Glu Pro Leu Thr Gln Trp Lys Gly Thr Val Leu Asp Gln

165 170 175

Leu Leu 178

> <210> 1471 <211> 253 <212>Amino acid <213> Homo sapiens

<400> 1471 Arg Asp Leu Gly Val Ala Leu Glu Ala Phe Gln Trp Ala Arg Ala Gly Asp Cys Gly Ser Gly Ala Gly Arg Ala Gly Gly Glu Gly Val Asp Ala 25 Gly Arg Arg Val Pro Glu Arg Gln His Arg Gly Arg Gly Gly Gly 40 Glu Pro Gly Arg Arg Gln Arg Gly Gly Arg Arg Gln Arg Ser Ser Ser Arg Arg Ser Gly Gly Asp Gly Asp Glu Val Glu Gly Ser Gly Val Gly Ala Gly Glu Gly Glu Thr Val Gln His Phe Pro Leu Ala Arg Pro Lys Ser Leu Met Gln Lys Leu Gln Cys Ser Phe Gln Thr Ser Trp Leu 105 Lys Asp Phe Pro Trp Leu Arg Tyr Ser Lys Asp Thr Gly Leu Met Ser 115 120 Cys Gly Trp Cys Gln Lys Thr Pro Ala Asp Gly Gly Ser Val Asp Leu 130 135 Pro Pro Val Gly His Asp Glu Leu Ser Arg Gly Thr Arg Asn Tyr Lys 145 150 155 160 Lys Thr Leu Leu Arg His His Val Ser Thr Glu His Lys Leu His 165 170 175 Glu Ala Asn Ala Gln Glu Ser Glu Ile Pro Ser Glu Glu Gly Tyr Cys 185 190 Asp Phe Asn Ser Arg Pro Asn Glu Asn Ser Tyr Cys Tyr Gln Leu Leu 200 205 Arg Gln Leu Asn Glu Gln Arg Lys Lys Gly Ile Leu Cys Asp Val Ser 215 Ile Val Val Ser Gly Lys Ile Phe Lys Ala His Lys Asn Ile Leu Val 235_. 230 Ala Gly Ser Arg Phe Phe Lys Thr Leu Tyr Cys Phe Ser

<210> 1472 <211> 147 <212>Amino acid <213> Homo sapiens

35 40 Ser Leu Val Gly Lys Leu Glu Gly Thr Arg Met Gly Asp Lys Ala Gln 55 60 Arg Thr Lys Pro Gln Met Gln Glu Glu Arg Arg Ala Lys Arg Arg Lys 70 Arg Asp Glu Asp Arg His Asp Ile Asn Lys Met Lys Gly Tyr Thr Leu 85 Leu Ser Glu Gly Ile Asp Glu Met Val Gly Ile Ile Tyr Lys Pro Lys 100 105 Thr Lys Glu Thr Arg Glu Thr Tyr Glu Val Leu Leu Ser Phe Ile Gln 120 125 Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly Ala Ala Asp 135 Glu Val Leu 145 147

<210> 1473 <211> 139 <212>Amino acid <213> Homo sapiens

<400> 1473 Cys Asn Ser Ala Glu Ser Arg Met Asp Val Leu Phe Val Ala Ile Phe 10 Ala Val Pro Leu Ile Leu Gly Gln Glu Tyr Glu Asp Glu Glu Arg Leu 20 25 Gly Glu Asp Glu Tyr Tyr Gln Val Val Tyr Tyr Tyr Thr Val Thr Pro 45 Ser Tyr Asp Asp Phe Ser Ala Asp Phe Thr Ile Asp Tyr Ser Ile Phe 55 Glu Ser Glu Asp Arg Leu Asn Arg Leu Asp Lys Asp Ile Thr Glu Ala 70 75 Ile Glu Thr Thr Ile Ser Leu Glu Thr Ala Arg Ala Asp His Pro Lys 85 90 Pro Val Thr Val Lys Pro Val Thr Thr Glu Pro Gln Ser Pro Asp Leu 100 105 Asn Asp Ala Val Ser Ser Leu Arg Ser Pro Ile Pro Leu Leu Ser 120 Cys Ala Phe Val Gln Val Gly Met Tyr Phe Met 135

<210> 1474

<211> 185

<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(185)

<223> X = any amino acid or stop code

Ala Pro Gly Ala Met Gly Ala Gln Val Arg Leu Pro Pro Gly Glu Pro Cys Arg Glu Gly Tyr Val Leu Ser Leu Val Cys Pro Asn Ser Ser Gln 40 Ala Trp Cys Glu Ile Thr Asn Val Ser Gln Leu Leu Ala Ser Pro Val Leu Tyr Thr Asp Leu Asn Tyr Ser Ile Asn Asn Leu Ser Ile Ser Ala Asn Val Glu Asn Lys Tyr Ser Leu Tyr Val Gly Leu Val Leu Ala Val 85 90 Ser Ser Ser Ile Phe Ile Gly Ser Ser Phe Ile Leu Lys Lys Gly 105 Leu Leu Gln Leu Ala Ser Lys Gly Phe Thr Arg Ala Gly Gln Gly Gly 120 125 His Ser Tyr Leu Lys Glu Trp Leu Trp Trp Val Gly Leu Leu Ser Ile 135 140 Leu Ser Trp Asn Ala Arg Glu Lys Val Asp Leu Xaa Asn Ile Thr Phe 150 155 Xaa Pro Gln Thr Ser Cys Ile Phe Phe Thr Ile Thr Ile Glu Lys Ser 165 170 Thr Phe Leu Ser Tyr Phe Pro Thr Ser

<210> 1475 <211> 91 <212>Amino acid <213> Homo sapiens

<210> 1476 <211> 159 <212>Amino acid <213> Homo sapiens

Gln Lys Pro Gly Gly Thr Val Ile Leu Gly Cys Val Val Glu Pro Pro 55 Arg Met Asn Val Thr Trp Arg Leu Asn Gly Lys Glu Leu Asn Gly Ser 70 Asp Asp Ala Leu Gly Val Leu Ile Thr His Gly Thr Leu Val Ile Thr 85 90 Ala Leu Asn Asn His Thr Val Gly Arg Tyr Gln Cys Val Ala Arg Met 100 105 Pro Ala Gly Ala Val Ala Ser Val Pro Ala Thr Val Thr Leu Ala Ser 115 120 Glu Ser Ala Pro Leu Pro Pro Cys His Gly Ala Val Pro Pro His Leu 135 Ser His Pro Glu Ala Pro Thr Ile His Ala Ala Ser Cys Tyr Ser 150 155

<210> 1477 <211> 139 <212>Amino acid <213> Homo sapiens

<400> 1477

Trp Gly Arg Arg Arg Gln Leu Val Ser Glu Ala Ala Arg Ala Gln Gly 10 Asp Pro Val Cys Ser Thr Met Ser Glu Glu Glu Ala Ala Gln Ile Pro 20 25 30 Arg Ser Ser Val Trp Glu Gln Asp Gln Gln Asn Val Val Gln Arg Val Val Ala Leu Pro Leu Val Arg Ala Thr Cys Thr Ala Val Cys Asp Val 55 Tyr Ser Ala Ala Lys Asp Arg His Pro Leu Leu Gly Ser Ala Cys Arg 70 Leu Ala Glu Asn Cys Val Cys Gly Leu Thr Thr Arg Ala Leu Asp His 90 Ala Gln Pro Leu Leu Glu His Leu Gln Pro Gln Leu Ala Thr Met Asn 105 Ser Leu Ala Cys Arg Gly Leu Asp Lys Leu Glu Glu Lys Leu Pro Phe 120 125 Leu Gln Gln Pro Ser Glu Thr Val Val Thr Ser 135

<210> 1478 <211> 331 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(331) <223> X = any amino acid or stop code

20 25 Arg Glu Arg Met Gln Thr Ser Lys Cys Asp Cys Ile Trp Phe Gly Leu 35 40 Leu Phe Leu Thr Phe Leu Leu Ser Leu Ser Trp Leu Tyr Ile Gly Leu 55 Val Leu Leu Asn Asp Leu His Asn Phe Asn Glu Phe Leu Phe Arg Arg 70 75 Trp Gly His Trp Met Asp Trp Ser Leu Ala Phe Leu Leu Val Ile Ser 90 Leu Leu Gly Thr Tyr Ala Ser Leu Leu Leu Val Leu Ala Leu Leu Leu 100 105 Arg Leu Cys Arg Gln Pro Leu His Leu His Ser Leu His Lys Val Leu 115 120 Leu Leu Leu Het Leu Leu Val Ala Ala Gly Leu Val Gly Leu Asp 130 135 140 Ile Gln Trp Gln Glu Arg His Ser Leu Arg Val Ser Leu Gln Asp 150 155 Cys Arg Xaa Leu Xaa Thr Pro Ala Val Arg Pro Xaa Glu Glu Ser Gly 165 170 Glu Gly His Trp Arg Arg Ala His Leu Thr Ser Ser Cys Pro Gln Ala 180 185 Thr Ala Pro Phe Leu His Ile Gly Ala Ala Ala Gly Ile Ala Leu Leu 195 200 Ala Trp Pro Val Ala Asp Thr Phe Tyr Arg Ile His Arg Arg Glu Pro 215 220 Lys Ile Leu Leu Leu Leu Phe Phe Gly Val Val Leu Val Ile Tyr 230 235 Leu Ala Pro Leu Cys Ile Ser Ser Pro Cys Ile Met Glu Pro Arg Asp 250 Leu Pro Pro Lys Pro Gly Leu Val Gly His Arg Gly Ala Pro Met Leu 260 265 Ala Pro Glu Asn Thr Leu Met Ser Leu Arg Lys Thr Ala Glu Cys Gly 280 Ala Thr Val Phe Glu Thr Asp Val Met Val Ser Ser Asp Gly Val Pro 300 295 Phe Leu Met His Asp Glu His Leu Ser Arg Thr Thr Asn Val Ala Ser 310 315 Val Phe Pro Thr Arg Ile Thr Ala His Ser Ser 325

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